SIGNIFICANCE OF PRE-1753 BOTANICAL EXPLORATIONS IN TEMPERATE NORTH AMERICA ON LINNAEUS' FIRST EDITION OF SPECIES PLANTARUM

James L. Reveal

Department of Botany, University of Maryland,
College Park, MD 20742, U.S.A.

INTRODUCTION

When Carl Linnaeus published the first edition of Species plantarum in 1753 he discussed some 889 species of vascular plants from temperate North America, here defined as the present-day continental United States and Canada. The information relative to these plants came from the efforts of men and women who either visited the New World or who lived there and collected plants as amateur or professional naturalists.

In a few instances they were gentlemen correspondents of Linnaeus' or were men in Europe who never traveled but supplied Linnaeus with collections sent by others. A few were chance collectors, some gathered plants as a hobby, and others to gain political favors. Occasionally a collector was a person trained in medicine and used that knowledge to search for promising plants that might be used in the treatment of maladies. More often collectors were members of the clergy who collected potentially important horticultural plants for their gentlemen supporters in Europe. This led not only to the discovery of many important ornamental trees and shrubs, but many New World plants of agricultural importance. The early Spanish explorators discovered a rich array of grains, fruits and vegetables that eventually found use in European culture and cuisine. The more notable were maize, potato, tomato, various squashes and of course a non-food plant, tobacco.

The early explorers who ventured into the New World were mainly interested in the riches of gold and silver. Even through natural history was of relatively minor concern, surprising numbers of books were published treating the native flora and fauna of the newly discovered lands. In 1526, Oviedo y Valdes published a book on the natural history of the West Indies based on his own observations in the Caribbean and Central America. Nicolas Monardes who never left Europe, published his book, in parts, on the natural history of the New World from 1569 to 1574. Both men were knowledgable physicans and as such were particularly interested in medicinal plants and their local uses. Monardes' book was rewritten and published in Latin by Carolus Clusius in 1574. John Frampton translated that work into English and published it in 1577.

The exotic vegetation of the new lands across the ocean

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proved exciting to the European naturalists, and a source of considerable confusion. Species somewhat similar to those in Europe which proved to be useful were often considered to be the same species, even if they were not, so as to encourage their use in the medical trade. Plants which were the same, but were of no use or interest to the European physicans, were either ignored or taken to be a different species. It is well to remember that in the late 1500s, the concept of species was essentially that proposed by the ancient Greeks, chiefly Pliny, and the unique New World species were proving difficult to fit into Pliny's scheme of the vegetable kingdom.

Plants which were of potential economic importance were sometimes ignored or not used by the Europeans. Maize was not used extensively in Europe as a table food, and is even today largely considered an animal fodder. Potato was not considered fit for the tables of the aristocratic, and was shunted off to the slaves of the New World or the poor of Europe. For some economically important plants, tradition indicated they were poisonous such as was the case with the tomato up to the end of the last century. Some plants, because they were used by the "heathens", were considered unchristian for if God had intended christians to have such foods, they would be found in Europe!

Jose d'Acosta, a missionary, lived in Peru from 1569 to 1588. His notes originally were published in 1589 and then expanded into a four-volume work in 1590. These volumes were translated into French, Flemish and German around 1600, and then into English in 1604. His exact observations are still a major source of information on the uses of plants by the native people of South America. d'Acosta, like Ovieda and Monardes, talked of maize, cassava and potato among other species. He also noted the heavy use of chili peppers, and reported that the Peruvian Indians were exceedingly fond of garlic which had been introduced into the New World by the Europeans. He called attention to the fine grapes in the New World, and introduced several kinds into Europe.

Collectors to temperate North America came only a few years after those that visited the more tropical regions. Early French explorers gathered plants and sent seeds and fruits back to France where they were soon flourishing in the gardens. Many of these species were gathered in what is today southeastern Canada. There was a desire on the part of the French to introduce plants not only of medicinal but of potential horticultural value as well. Many temperate conifers and hardwoods were ideally suited to the French climate and quickly were adopted, unlike the more tropical species.

By the start of the 17th century interest in plants was beginning to slowly move away from the rigidness of the Dark Ages and into a more enlightened period. The nearly 500 species of plants described by Dioscorides in his work on materia medica were destined to give way to over 6000 species in the works of the Bauhin brothers, and especially Gaspard Bauhin. They described several new species from the New World in 1623. The great philosophical barrier of Old World versus New World speciation had finally been broken, and with that restriction lifted, the urge to

search and discover new plants from all corners of the world began to be felt by botanists and explorers.

As the 17th century began some 50 species of North American plants were known from cultivation in European gardens. The concept of the botanical garden, begun in Venice in 1545, was rapidly becoming the fashion, and soon no medical school was complete without a rich and varied garden of medicinal plants. Botanical gardens were established in England and France by the start of the 1600s, and with them came the beginnings of a golden age of botanical exploration throughout the world.

THE GARDEN CURIOSITIES

During the first half of the 17th century, botanical explorations in temperate North America were restricted to individuals who, from time to time, gathered seeds. Little concern was given to the preservation of dried voucher specimens, and almost none to recording the details of geographical location, plant association or similar information. John Tradescant the Younger came to Virginia in 1637 and collected plants along the York River. The purpose of his trip was to gather novelties for his natural history museum, known as Tradescant's Ark, which he and his father had established at Lambeth in London. Tradescant brought to England such species as the tulip tree, Liriodendron tulipifera, the red maple, Acer rubrum, sycamore, Platanus occidentalis, black walnut, Juglans nigra, and the bald cypress, Taxodium distichum. Although herbarium specimens of these species were not made in Virginia by Tradescant, various collectors in later years made voucher specimens of John Tradescant's original introductions. These specimens are still extant and may be examined in the Sloane Herbarium at the British Museum (Natural History) in London. The museum specimens shown in Tradescant's Ark were eventually obtained by Elias Ashmole, and they became a part of the Ashmolean Museum, and are now a part of the University of Oxford Museum at Oxford, England.

To be sure the early discoveries of temperate North American plants were finding their way into the literature. As already mentioned, Gaspard Bauhin reported several in 1623. However, many were also described, illustrated and evaluated by herbalists. Maize and other New World plants were well known to European naturalists early in the 16th century, and a number of herbals contain illustrations of these species. The tradition of herbals was slowly being replaced by works of botany more concerned with the classification and identification of species, and less so with the medicinal uses of plants. Nonetheless, John Parkison, the last of the English herbalist, was destined to describe several American species in his 1640 herbal, Theatricum botanicum. Plants reportedly found originally in Canada, New England and Virginia were included in Parkinson's book.

As for the Canadian references, Parkinson took most of his information from Jacques Philippe Cornuti's Canadensium plantarum published in 1635. This book described species of plants found in cultivation in and around Paris. A total of 68 species were described, but only 38 were from Canada or the New England area. Cornuti's book was the most scientific effort yet produced devoted to New

World botany, and nearly all of the 38 copper plate illustrations of Canadian plants executed by Cornuti were ultimately cited by Linnaeus when he wrote the first edition of Species plantarum in 1753. Linnaeus referred to Parkinson's book also, but much less frequently than Cornuti's.

Before leaving this period Thomas Hariot, friend and mentor of Sir Walter Ralegh, must be mentioned. Hariot came to Virginia in the 1580s and described what he found in a famous pamphlet published in 1588. Entitled "A briefe and true report of the new found land of Virginia", his remarks are valuable because of the detail he devotes to the forest resources and medicinal plants. He describes the native uses of grapes, beans, potatos, melons, sunflowers, tobacco, and a wide variety of small grains including oats, barley and what he called wheat. Hariot reported on the several different kinds of acorns used by the Indians as well as walnuts, strawberries, mulberries and crab apples. Among the identifable trees were species of oak, elm, ash, walnut, fir, juniper, maple, witch hazel, willow, beech, sassafras and pines. Hariot's report on Virginia -- which was also based on observations made in North Carolina -- was an exceedingly glowing one, and while not consulted by Linnaeus, it is of interest today for its early information on plant ecology and ethnology.

There were many other similar publications on the general aspects of the flora of temperate North America published by travelers prior to the 1680s. Most were in the vein of Hariot's. To Linnaeus they were of little or no interest. Even to contemporary naturalists they were little more than descriptive catalogues of vague but wonderous species of plants which may or may not have much of a factual basis in reality. In many cases such publications were "flowery" so as to attract colonists to the New World. To the English, however, there was no question that great botanical treasures awaited discovery in the New World and that skilled and knowledgable men were needed to survive the rigors of the new lands. The rapid growth of scientific organizations and thought in England and France was fomenting desires to explore, discover, and to answer questions about nature.

After the establishment of the Oxford Club in 1648, other scientific organizations were soon formed. Upon the final restoration of the Stuart monarchy in 1660, the Royal Society of London was established. This was, at least by modern standards, the first truly scientific organization in England. The first twenty years of the organization was a period of maturing and promoting scientific endeavors in various parts of the world, including the subtropical and tropical regions of the New World.

The growth of botanical gardens in Europe was significant during the last half of the 17th century. What initally had begun only as a desire of the nobility to possess exotic plants and animals from strange new lands soon escalated beyond the royal estates and gardens into the homes and estates of not only the more wealthy families of Europe, but even to the gardens of the common people. The exploration of the new lands across the sea, in Africa, the New World, and the Far East was creating new wealth. These new men of means were often

well educated, skilled in the arts, and were impressed by exotica acquired by of their fellows. They were also willing to associate with persons of ability, be they in art or literature, or persons trained as natural philosophers interested in the classification and identification of vascular plants. With the growth of botanical gardens, the craze for exotic garden plants increased, and friendships with knowledgable botanists soon became paramount for nearly every gentlemen of means who wished to have a well-curated cabinet of natural objects. The classifiers and identifiers of plants suddenly became highly esteemed in the gentlemen's circle of close friends.

The Royal Society of London provided a common meeting place for scholars, noblemen and men of means. The union was perfect for land was needed for gardens, money and connections were needed to provide the means to obtain plants. What better a relationship to foster than that between the hopeful botanist, the newly established exporter of foreign curiosities, and the landed gentry who wished to have the exotics in their garden?

With the beginning of efforts to prepare a detailed review of the plants of the world, especially by English workers such as John Ray and Robert Morison, to say nothing of other workers in Europe, the need for more collectors in temperate North America grew. More and more members of the Royal Society began to call for an expedition to North America. Finally, it was decided to fund an expedition and a search was begun to find a suitable naturalist. The results produced John Banister.

THE VIRGINIA BEGINNINGS

John Banister was born in 1650 and educated at Magdalen College at the University of Oxford where he received his B.A. in 1671 and his M.A. in 1674. He continued to serve the University after graduation, first as a clerk and then as a chaplain. At Oxford he met Dr. Robert Morison, the University's botany professor, and came to know the Bishop of London, Dr. Henry Compton, a noted gardener and botanical enthusiast. Under the guidance of these two men, Banister began to botanize and make collections of dried plants in the Oxford area. His skills soon manifested themselves, and Compton encouraged Banister to accept a ministerial position in Virginia. His duties included collecting objects of natural history while serving the needs of the Church of England.

Banister accepted the position and left for Virginia in 1678 under the sponsorship of a number of members of the Royal Society. William Byrd I of Virginia, served as treasurer of this group.

At first Banister stayed with Byrd at James River Falls and then at Westover, the Byrd estate. Not only did Banister send back to England a large number of seeds, fruits, dried specimens, and illustrations of native plants, he also received plants from England and plant them in Virginia. The European plants were coming from Jacob Bobart, the gardener at the University of Oxford, who, altogether with his father, served the University for over 60 years.

Financial support for Banister's efforts was never really substantial. His English patrons included such men as Dr. Hans Sloane, Dr. Henry

Compton, Dr. Martin Lister, Robert Morison, Jacob Bobart, George London, James Petiver and others, but none seemed capable of providing him with sufficient funding so that he could devote his full efforts to botanical explorations in Virginia.

In the 1680s, Banister entered into a lively correspondence with John Ray, and sent to him a large number of plant specimens. At the same time Banister was also providing specimens to a second major English botanist, Leonard Plukenet, Ray's rival. Ray took a catalogue of Virginia plants sent to him by Banister and published it is 1688 as an appendix to his second volume of Historia plantarum. Plukenet, on the other hand, took his Banister specimens, and in particular the Banister illustrations, and began to publish the figures in 1691, and a series of new scientific names (polynomials) in his first book, Almagestum botanicum, published in 1696.

To a degree Banister was depressed by these publishing activities. He himself began preparing manuscripts with the idea of publishing his findings under his own name. His previous attempts to publish his own works had failed for whenever he sent a manuscript to Europe, it was taken and published by others under their own name. Morison, Ray and Plukenet were all guilty of this, from time to time, but without their efforts to present the Virginian discoveries at once, others, especially workers in France and Holland, would have described the species anyway when they observed the uniqueness of the plants in their garden.

In spite of John Banister's difficulties, his fortunes changed somewhat when he married a wealth widow, and suddenly found a ready source of modest support. In addition, his station in Virginia was changing, and while still a minister, he accepted other duties and these often kept him out-of-doors collecting plants. Soon, the number of Virginia plants Banister sent to England surpassed 300 species, and was destined to reach about 340 species of vascular plants, 100 insects and about 20 mollusks before a rifle ball ended his life in an accidental shooting while he was out botanizing. The year was 1692, and his passing would close the opening period of temperate North American botany.

To Morison, Bobart, Ray and Plukenet, the collections of John Banister were the mainstay of their knowledge of temperate North American botany. Bobart took up the writing of Morison's Plantarum historiae universalis oxoniensis when Morison died in 1683, and began to describe and illustrate Banister species based on a combination of garden-grown material raised at Oxford and herbarium specimens. Banister's catalogue, which was published by Ray in 1688, was not illustrated, but Plukenet's books were illustrated. Unlike Bobart, however, Plukenet based his illustrations almost entirely upon herbarium specimens or figures executed by Banister which Plukenet obtained. Between these men, and others, notable Joseph Pitton de Tournefort in France and Paul Hermann of Leyden, Banister's plants were rapidly described and characterized.

Of perhaps even greater importance were the many species of vascular plants Banister introduced into western Europe. He left a legacy of exotic trees, shrubs and herbs

which generations of naturalists in the future would examine in even greater detail. Linnaeus would not only see and grow many of the Virginia species introduced into Europe by Banister, but would come to acknowledge Banister as an important collector of temperate North American species.

THE BOTANY CLUB

The death of John Banister was a serious blow to English botany and its attempt to classify temperate North American plants and to obtain seeds and fruits to introduce such species into cultivation. The loss of Banister produced a significnt gap in the active program of plant explorations in the British colonies of North America, and it was immediately agreed that a new person had to be found to replace him.

The Royal Society had been growing, expanding and changing over the three decades from its foundation in 1660 to 1690. A new generation of men were coming into power within the Society, and even within English society as well. Among the leaders of this new group was Hans Sloane. Sloane was a physican who had gone to the New World with the new Royal Governor of Jamaica, the Duke of Albemarle. He left England in September of 1687 and returned in late May of 1689 laden with several hundred new plants. Within a short period of time, Sloane increased significantly his knowledge of botany by studying with Tournefort and Magnol in France, and by working on his own collections. Sloane soon obtained a number of Royal appointments including physician to Her Majesty the Queen, and established a large and profitable practice. Sloane married a wealth widow, whom he likely met in Jamaica, and was soon in a position to devote much of his time to the gathering of curiosities from throughout the world. Sloane would also rise to power in the Royal Society, holding the important post of treasurer which saw to the publication of the Philosophical Transactions, the scientific journal of the Society. It was due to Sloane that the journal saw a significant rise in the number of papers dealing with botany. All in all, Sloane would live for 93 years, dying in 1753. In the years of his activities in the natural sciences, Sir Hans Sloane would obtain the largest collection of objects in the world, and because he lived so long, was able to obtain -- and thus save for future generations -- the volumes of herbarium specimens made by a majority of his contemporaries.

Others who rose to prominence during the 1690s were men who can be roughly divided into two groups: scientists and the supporters of scientists. The distinction is not absolute, as the life of Sir Hans Sloane witnesses. Foremost of the scientists was John Ray. His efforts during the 1680s to produce a two-volume work on the classification of all the plants of the world was, and still is, considered the finest produced of this period. Ray is best known for his flora of England which was the standard that Linnaeus had to overcome a half century later to win the critical support Linnaeus needed in England to carry his ideas of plant classification and nomenclature. Even so, the arrangement of plants proposed by Ray was still preferred by most English workers over Linnaeus' so-called "sexual" system. Today, many consider Ray to be the "Father of systematic botany". Close to Ray was Samuel Doody, Keeper

of the Chelsea Physic Garden, the medicinal garden of the Society of Apothecaries. A neighbor was Samuel Dale who would be an important intermediary between Ray and other English naturalists, and the men and women who collected plants in North America. Dale would amass a large collection of dried plants, and it would be to Dale that the Ray herbarium and library would go when Ray died. Ray was modestly but consistently supported by a number of gentlemen who were interested in botany. Most important was Charles Hatton, an aristocratic promoter, who funded many of Ray's publications.

In the opposing botanical camp were the followers of Leonard Plukenet. Plukenet, like Ray, was a professional botanist, and equally skilled in the art of systematic botany. Unlike Ray who was a man of ill health and abject poverty, Plukenet was at least healthy. His temperment was less conducive to good will, and the Society was badly divided into factions based on the supporters of Ray versus Plukenet. While Ray had a broad base of support, Plukenet's was largely restricted to the even more ill-tempered John Woodward. Woodward, who was even less well thought of by his contemporaries, was not as skilled as a naturalist as Plukenet, and he tended to be ignored by most of the membership of the Royal Society.

Some of the men of note involved in the promotion of botanical science in the Royal Society were James Ayrey, a Quaker merchant; Charles Du Bois, secretary of the East India Company; and Dr. Henry Compton. Compton is a special case. He was a major supporter of the Society's efforts to obtain plants, but as an avid gardner and the Bishop of London, he was ideally positioned to make certain convinient appointments which benefited both systematic botany and his personal garden. In short, it was no accident that many naturalists that were sent into the field by the Royal Society were ministers for the Church of England.

Bordering both groups were two men. George London was initially the gardener for Henry Compton, but from the late 1690s to the early 1700s, he was gardener to William and Mary, and after her death, to William. As the Royal Gardener, London was ideally suited to ensure a proper place for the exotic plants coming into England from foreign lands. A skilled naturalist in his own right, London did much to foster the international exchange of seeds and bulbs, and to maintain some degree of cooperation between the various factions within the systematic community in London.

A second person is of considerable importance, especially in the history of the discovery of vascular plants in temperate North America. James Petiver was born in about 1663, and established an apothecary shop in London out of which he maintained a world wide correspondence with collectors of natural objects. Interested mainly in insects and shells, Petiver relied mainly upon ship's captains and surgeons, soldiers, naval officers, local physicans, assorted farmers, and even the bored wives of many gentlemen to collect curious plants and animals for him, and send them to London so that he might describe them in his own publications.

Petiver was not only a major promoter of the natural sciences to the amatuer, he

often saw to it that their discoveries were rapidly published. Unlike most of his contemporaries, Petiver was willing to provide his correspondents with practical information includings sets of instructions on how to collect and preserve dried specimens, ship seeds and seedlings, and to record useful information to go with the collections. As an author, Petiver was respected. He was not of the stature of Ray, or even Plukenet, for his observations were often with little regards to what had already been published and he had a tendency to redescribe species others had already proposed. His pamphlets and articles are often filled with valuable historical information. As Petiver was receiving so much material from causal collectors, it is only by reading his publications that one can find who was collecting where at any one time in history.

All of these men were members of the Royal Society, but as a whole, the members of the Society were not devote to the subject of botany to the degree satisfactory to those who wished to concentrate on the plant kingdom. The stature of the Society was such that causal discussions were often difficult, and the mere matters of the day-to-day discussions of botanical nomenclature, the latest book on the mosses of England, or the problems of shipping seeds from China were not the type of heady matters one ought to present before the entire membership of the Society. Thus, those gentlemen interested in botany met informally at what must have been one of the first botanical societies in the world. It was known as the Temple Coffee House Botany Club.

Members of the Temple Coffee House Botany Club met every Friday evening. There are no minutes of the meetings, for it was an informal gathering, but contemporary correspondence indicates that the membership consisted of such men as Sloane, London, Compton, Petiver, Doody, Dale, Ray, Plukenet, Woodward, and when in London, William Sherard and the younger Jacob Bobart of Oxford. From time to time field trips were taken, usually on Sundays, to gardens or places of botanical interest. In the relaxed comforts of the Temple Coffee House, the more detailed aspects of botany could be discussed and it was not unusual for members to bring recently acquired collections of exotic species for demonstration before the membership or to ask for help in establishing the correct scientific name.

It was here, no doubt, that the death of John Banister was disccused, and the need for a replacement reviewed. Compton likely proposed that he, as the Bishop of London and a proponent of the expansion of the Church of England in the New World, could find a position within a parish if the Society could find a naturalist willing to take vows. Funding support was likely discussed as well, and a group of supporters would be established and a treasurer appointed. It would be a duty of the treasure to secure a governmental post so that the colonial government would support the naturalist when he went about his collecting activities. Once the details were worked out, and the plans finalized, then the matter was brought before the membership of the Royal Society for approval. The system worked well.

It was William Byrd I who urged the Royal Society to

send a new collector to Virginia, and called for a search. This was initiated in 1693, but no one was found that was willing or qualified to fill the position. Funding was finally found in the form of a position from the Royal Governor of Maryland, Francis Nicholson, who had previously been Vice-Governor in Virginia. A strong supportor of the expansion of the Church of England, Nicholson's duties in the Catholic dominated colony of Maryland w ere to transform that colony to the Anglican faith. He moved the capitol from St. Marys to Annapolis, and saw, in the needs of the Royal Society, a means of adding another clergyman.

In late 1694, Edward Lhwyd, Keeper of the Ashmolean Museum at Oxford, wrote to Compton that he had a young man that might be qualified. Lhwyd indicated that he could train the young man in natural history, but it was up to Compton to provide training in the ways of the Church. The young man he spoke of was his deputy keeper, Hugh Jones.

BOTANY IN MARYLAND

Hugh Jones came to Oxford in 1694 on a pauper's scholarship. Born in Wales, he was probably only 24 when Lhwyd reported to Compton that he might be qualified. Over the course of 1695, Lhwyd provided Jones with a basic education in the natural sciences, and in December of that year was able to send him to London armed with glowing letters of introduction and instructions to take his religious vows. Over the course of the month, Jones was schooled on the matters of the Church of England, and in the end was ordained a priest and became a deacon. He was now ready to go to the New World and begin a new life in Maryland.

The Byrd resolution proposed and accepted by the Royal Society was to send a naturalist to Virginia. Funding, however, could not be found in that colony but was obtained from Maryland's governor. When Jones completed his training at the end of December, 1695, he set out for the coast from London to board a ship for the Chesapeake Bay, and the new capitol of Maryland, Annapolis. Rough weather made it impossible for the ship to depart for several weeks, and from time to time, Jones would travel back to London. He could not afford to stay long in the city, but apparently did visit the Temple Coffee House Botany Club where he fell into the Sloane circle of influence. It was James Petiver who took command of the Reverend Jones and began to educate him in the fine art of practical botany. Through him and other members of the Botany Club, Jones received instructions, various supplies, and an occasional piece of equipment. Most importantly were the personal contacts he made. From Petiver, Jones received a request that he should send to him insects and fossils; for Ayrey and Doody he should gather seeds and fruits; and for London and others he should make herbarium specimens. Petiver further urged that Jones should send everything to him for disperal. He, in turn, would provide Jones with new publications in the field of natural history, help with his medical needs, and provide news about London.

When Jones' ship finally departed in the spring of 1696, Jones was as educated as could be expected. He eventually landed in Maryland, arriving in Calvert County in the heat of August and rode horseback to Annapolis -- a city of less than 40 buildings

and considerable mud -- where he resided with Governor Nicholson for five weeks.

The initial proposal was for Jones to serve as Nicholson's chaplain, but even before Jones left for Maryland, this proposal had been altered to allow Jones to assume duties in one of Maryland's parishes. After five week in Annapolis, Jones left for Christ Church Parish in southern Calvert County where he assumed the rectorship of one of Maryland's largest and most wealthy parishes.

During the summer and fall of 1696, Jones collected what he could, and continued to look for objects of interest for his London friends over the winter. In March of 1697, Jones sent letters and two boxes of specimens to Petiver in London. During the growing season of 1697, Jones searched among the meadows and woods near his church, along the edges of the Patuxent River, and the cliffs along the shore of the Chesapeake. He found a wide variety of herbs, shrubs and trees, assorted insects and butterflies, and fossils. Soon he had specimens of birds, small mammals and minerals to go along with the seeds and young plants we was sending to London.

What, no doubt, Jones sent in great expectation, and awaited in the same fashion, was not received with the same level of enthusiasm previously experienced by Petiver and others when a shipment from Banister arrived in the Old World. The seedlings were ill-packed and did not survive the sea voyage. The seeds were poorly labeled, the shells unsorted, the plant specimens small and fragmentary, and the insects broken or damaged. The animals were poorly preserved and few could be adequately identified or even characterized. For the members of the Temple Coffee House Botany Club, the Reverend Hugh Jones was a profound disappointment.

For Jones, Maryland was not all one could wish for either. The winter of 1696-1697 was especially hard. He writes that snow came in November and remained until March, and at times the snow exceed two feet in depth. The Chesapeake Bay became frozen with ice so thick that sailors could walk to the shore from their ice-bound ships. The cold rains were hard on Jones and members of his parish. Still, for the young minister, his ministry was a challenge.

For Jones, as with most members of the Church of England in Maryland, the long history of Catholic rule represented the past and it was his duty to overcome the errors of religious views previously imposed upon the people. That Maryland had been settled as a Catholic colony was of no immediate importance to the Crown, the Royal Governor, or even the Reverend Hugh Jones. His directions were to conduct all services according to the dictates of the Church of England, no matter the local religious preferences in the community. Similarly, the obvious threat imposed by the growing number of Quakers coming southward from Pennsylvania was a matter of concern, and Jones was a signatory to a document demanding governmental control over the teachings of the Quakers. As a minister in Maryland's most wealthy parishes, Jones was well placed in the social fabric of the Colony. His yearly income was such that he was a wealthy man, that coming from a tax, in tobacco, levied by the sheriff for the minister. The

levy was based on the number of people in the parish, with each adult white man or women equal to one share per person while any black slave, no matter the age or sex, was equal to two-thirds of a share. Good year or bad, the minister received his levy.

For Petiver the failings of Hugh Jones in Maryland to carry out his mandate to collect was particularly troublesome. As his strongest supporter in London, the plight of trying to collect, and survive in the New World, were understood by Petiver. Petiver stood to lose his own investment of time and energy if Jones failed, but it was clear even to the apothecary that the hopes for a significant improvement in Jones' abilities were ill-founded. Petiver himself expressed his disappointment when he reviewed his broken insects, yet he attempted to describe what he could. The bulk of Jones' Maryland plants went directly to James Ayrey and George London, and while Petiver received a few, these were not a significant part of his botanical holdings. However, in late 1697, George London gave to Petiver two large volumes of dried plants gathered in the New World, including a significant set of Jones' plants. Armed with these two volumes filled with Maryland plants, Petiver set at once to characterize them and to prepare an article for publication in the Philosophical Transactions.

To further this effort, Petiver wrote to Jones urging him to send all collections that he could immediately. In addition he told Jones of the disappointment his collection had caused in London and informed him of a move to sent others to the Colony. If Jones was to receive credit for his work in Maryland, Petiver warned, he had to send his plant and animal collections before the end of 1698, for in that year, others would be collecting in Maryland.

At the November, 1697, meeting of the Royal Society, William Bryd II moved that the Society should find "a Fitt person" to be sent to "Virginia in order to make observations and Descriptions of all the Naturall productions of those parts and to write the History thereof." Although Byrd urged that the naturalist be sent to Virginia, the remaining part of his motion stated that for "such a fitt person the charge of his passage and 25 pounds per Ann. would be allowed him by the Governor of Maryland." Once again, Francis Nicholson offered to fund the collector, and the naturalist was to be in Maryland, not Virginia.

Nearly all of the necessary arrangements were completed at the Temple Coffee House Botany Club before the vote and William Vernon, a fellow of Peterhouse at Cambridge University, was determined to be that "fitt" person called for in Byrd's resolution. He was approved at the December meeting of the Royal Society, and set out for Maryland in January, 1698.

Vernon arrived in the Maryland in April and he began to collect almost immediately. Vernon's proposal was to remain in Maryland for three years, and to concentrate upon the bryophytes, lichens and similar non-vascular plants. He had received permission from the University to be gone from Cambridge with the proviso that he study botany, not marry, and report each year that he was alive!

The warnings sent to

Jones were heeded, and a large number of plant collections arrived in London in early 1698. Immediately Petiver set to work upon them, in concert with the Geogre London collections already in hand, but by this time Petiver was somewhat less concerned about his interests in Maryland for he had played a trump card in the form of Dr. David Krieg.

David Krieg was a Prussian friend of James Petiver's who had been living with him for much of 1697. Krieg had been illustrating many of Petiver's scientific papers during the year he was staying in London, and as a physican and skilled naturalists, Krieg was an ideal person to venture into the field. Petiver had been a party to Byrd's proposal to send Vernon to Maryland, but the opportunity to send another collector, especially one devoted to him, could not be passed by. During the conversations relative to Jones, Petiver must have convinced Krieg that he should go to Maryland as well. Krieg could not obtain support from the Royal Society, or even Francis Nicholson, so it was necessary for him to find a position as a ship's surgeon. This accomplished, Krieg departed in March of 1698, nearly two months after Vernon, and arrived in April just before Vernon.

Krieg's close and personal friendship with Petiver is well known, and their letters of affection continued well after their year together at Petiver's home in 1697. Perhaps as a part of that relationship, Petiver gave to Krieg a young man named Issac who was to assist Krieg with his explorations. Upon his departure for the New World, Petiver presented Issac with a rather famous set of instructions:

> When ever you goe ashore take with you a Quire of Brown Paper or Collection Book. An Insect Box, Pins & a small Viall halfe fil'd with Spirit in which you drown all your supernummery Flies, Beetles, Catterpillars, & other Insects especially such you find in water. Also a Booke for Butterflies & Moths of each wch get al you can find, with a paper bag or two to put all ripe seed, ffruit & berries as also all ye shells you meet with both land & water & as many of each sort as you can find; such as are thin & brittle you must put into a Pocket by themselves with moss or any soft leaves to keep them from breaking.

These instructions were exact and perhaps a bit overbearing, especially if Issac had actually carried them out fully to the letter. As fate would have it, Issac was never allowed to leave the ship, and thus was of no value to Krieg as an assistant.

Petiver was not the only one trying to get a personal collector into Maryland. John Woodward -- the vowed enemy of Sloane and Petiver -- and his botanical associate, Plukenet, also wanted material from Maryland. At first, apparently, Woodward and Plukenet did not receive Jones material, and were not slated to receive Vernon collections either. Fearful of this, John Woodward apparently wrote to the Royal Governor, Francis Nicholson, and complain of Sloane and others in London. He implied that there were collectors in Maryland who were taking objects of nature without his permission, and that such person -- Jones, Krieg and Vernon -- were associated with such

"Rogues and Rascalls" as Sloane, Ray and Petiver. This correspondence must not have greatly impressed Nicholson for he knew of Woodward from others. Still, Petiver was concerned and in his letters urged Jones to send Woodward specimens which, apparently, Jones did. Vernon wrote Sloane from Maryland that although Woodward had claimed over 100 correspondents in America, he had met none and suspected Woodward's honesty. Vernon ended his commentary on Woodward by calling him "an abominable Villanous & Silly fellow".

The Reverend Hugh Jones knew that Krieg and Vernon were coming, and both men carried letters of introduction from Petiver. It is likely that all three men met each other in Maryland. It is certain that Krieg and Vernon collected jointly, and likely traveled together on a few occasions.

The collecting activities of Krieg and Vernon were limited to the coastal plain of Maryland, and an examination of their extant collections clearly shows that Krieg was able to collect plants more early in the year than Vernon. This was of little initial concern to Vernon as he was planning to stay in the Colony for three years. In July of 1698, Vernon wrote to Sloane that he was having to return to London. This was most likely because he had learned that Francis Nicholson had been appointed Royal Governor to Virginia, and would shortly leave Maryland. Without Governor Nicholson to support his position, Vernon would have to depart. Krieg, who planned to spend only the growing season in Maryland, collected more rapidly, gathering plants, insects, birds and mammals, fossils, shells and assorted other items of natural curiosity. In October of 1698, Krieg and Vernon departed the Royal Colony of Maryland and arrived together in England less than two months later.

Almost immediately the collections of Krieg and Vernon were divided into sets and sent out to the supporters of Vernon, with duplicates of the Krieg collections going to many of the same people as well. Sloane received a large set of these collections, and these, in turn, were sent to John Ray for naming. Ray was in the process of completing a supplement to his Historia plantarum, and the new Maryland collections would proved a valuable addition to the world's flora. Krieg specimens went to Plukenet, probably through Petiver, and Petiver provided Sloane with additional material which was not sent to Ray. Duplicates were accepted by Ayrey from both Krieg and Vernon, and Sloane received a set of Vernon specimens directly from the collector. Some material was sent to William Sherard at Oxford. Seeds and fruits were distributed among the various growers, and soon Maryland plants were flourishing in English gardens.

BOOKS AND ARTICLES

The first of the major papers dealing with the natural history of Maryland was published by James Petiver. It appeared as an article in the last 1698 issue of Philosophical Transactions and was a catalogue of the plants and animals found in Maryland by Hugh Jones. In all 54 vascular plants were reported by Petiver. The majority were species previously known to naturalists and had been found in Virginia by Banister and other naturalists. A few were considered to be new species

by Petiver, and described as such. None of the species was illustrated.

A small collection of plants had been gathered in Maryland prior to the arrival of Hugh Jones in 1696. A few species from the Colony were described by Plukenet in 1696, and one was illustrated as early as 1691 in Phytographia, his book of illustrations. It is unclear who might have gathered these plants and when. A possible candidate is a ship's surgeon and later correspondent of James Petiver, Dr. John Smart. He gathered plants in Maryland in 1708. He is best known for his plants collection from the Hudson Bay region of Canada which he obtained in 1708. These specimens are found in the Petiver and Plukenet volumes of dried plants in the Sloane Herbarium.

In 1700 Plukenet published a second volume devoted to botany. His 1696 book, Almagestum botanicum, had been well received but was criticized as incomplete as a world flora. This was indeed true, and a supplement, Almagesti botanici mantissa was released in 1700. The Mantissa contained the description of over 200 species of Maryland plants, and several were illustrated in the Phytographia section included with the Mantissa. Most of the Maryland plants reported by Plukenet were those gathered by Jones and Krieg. A new book, Amaltheum botanicum, was published in 1705 by Plukenet. In that year only 16 Maryland species were described, but numerous plants previously described from the Colony were illustrated in 1705.

John Ray published a supplement to his two-volume Historie plantarum in 1704. Called the Supplementum, Ray accounted for over 400 polynomials applied to Maryland plants. In addition to new species proposed by Ray, he listed, sometimes in synonymy, sometimes with comments, all previously published names which had been applied to Maryland plants by Petiver and Plukenet. William Sherard, and perhaps Jacob Bobart, described a small number of Maryland plants which Ray published in his Supplementum. Ray also published an index to James Petiver's herbarium in the Supplementum, and this contained descriptions of a few new species from Maryland.

From 1699 to 1702, Petiver added other new species of Maryland plants to the literature. These appeared in a series of pamphlets published by him, and many of the species were illustrated.

In addition to the Maryland plants reported in the published works of Plukenet, Petiver and Ray, these authors published new species from other regions of temperate North America as well. The majority came from Virginia, but a growing number of new collections were coming to Europe from the Carolinas and from the New England area. Unlike Banister and Vernon, who were professional naturalists in the sense that their positions were supported by the Royal Society, collections from other areas were being gathered by amateurs. Most of these people were ship's captains or surgeon, local residents, or the occasional visitor. None was destined to become a major supplier of plants to European gardens, however, and their impact upon the history of systematic botany is exceedingly limited.

Botanical explorations essentially ended in Maryland with the departure of Krieg

and Vernon in October of 1698. Jones remained in Maryland and continued to serve his parish. He gathered specimens in 1699, but by 1700 the effects of tuberculosis were beginning to sap his strength. His letters became less frequent and were more often filled with indications of his declining health. Finally, in January of 1702, Hugh Jones, minister and naturalist died. He was probably 31 years of age.

The failure of Jones, Krieg and Vernon in Maryland was a serious blow to the men of the Royal Society, and especially the members of the Temple Coffee House Botany Club. To be sure others were collecting along the eastern seaboard of North America, and James Petiver continued to receive specimens from a large number of persons from New England to Georgia. Several people were in Virginia and the Carolinas collecting specimens which Petiver would describe. Yet, death was taking its toll even of the membership of the Botany Club. Ray died in 1705 and Plukenet followed in 1706. Petiver himself would pass away in 1718, but by this time, Vernon and Krieg had both died.

Botany itself was changing. The desire to have exotic plants had not lessened in any fashion, but new and more exciting species were coming from the subtropical and tropical regions of the world. The growing diversity of flowering trees and shrubs from China and Japan entering Europe was proving to be far more exciting than similar species from temperate North America. Likewise, the succulent species being found in southern Africa were suddenly attracting a large number of enthusiasts, to say nothing of the bulbous species native to northern Africa and parts of the Middle East. Horticultural interests in temperate North America were waning.

The nomenclatural confusion was rapidly getting out of hand, and the lack of systematic order and a useful classification scheme -- in spite of Ray and Tournefort -- was causing great difficulties in attempting to classify the hoards of species coming to Europe from foreign lands. Publication costs were rapidly esculating so rapidly that publishing became difficult. The idea of the "genus" had been established by Tournefort, who died in 1708, and Ray had proposed groups of genera which we would today call families, but it would remain for the Jussieu family of Paris to complete these ideas, and that would be after 1753. Botanical exploration continued in temperate North America, and many unique species became known in Europe. A twenty year period of neglect would exist from 1700 until 1720 although a review of extant herbaria collections in Europe reveals a period of considerable active. Without these discoveries being published, however, their existence was not known and it would remain for others to complete the task of describing the native flora of temperate eastern North America.

THE CATESBY YEARS

Mark Catesby is perhaps the best known of the American naturalists. Born and educated at Essex, Catesby found that he had an early interest in the natural sciences due to his close friendship with Samuel Dale, the long-time friend of John Ray. Dale, the Braintree apothecary, was the author of the widely used Pharmacologia and had acquired a fine herbarium over years of plant collecting. He received

many specimens through his association with the Temple Coffee House Botany Club. With Dale's encouragement, but limited support, Catesby went to Virginia in 1712 to pursue a career as a naturalist. He went to live with his sister, Elizabeth, who had married Dr. William Cocke, an Englishman who had migrated to Virginia in 1710. A friend of the Royal Governor and the Byrd family, these associations proved to be exceedingly useful to Catesby, and he took full advantage of them. Within a week of his arriving in Virginia, Catesby met William Byrd II. Catesby spent a part of the summer and fall of 1712 at Westover, the Byrd estate, and gathered plants in the area where John Banister had roamed 20 years before.

Encouraged by his friendship with Byrd, Catesby began to collect everything he could find. Within a year Governor Spotswood sent to Henry Compton a large consignment of seeds collected by Catesby along with a number of herbarium specimens. The specimens went to Dale, and he informed the members of the Temple Coffee House Botany Club of the many interesting and finely collected plants he was receiving from Catesby. By 1715 James Petiver was writing to Catesby and asking the young naturalist to send him specimens.

When Catesby returned to England in 1719, he brought with him a large collection of vascular plants which he gave to Dale. Dale shared the Catesby material with William Sherard at Oxford who, from 1703 to 1717, had been consul at Smyrna, a city-state in Turkey. Sherard had been working on a revision of Bauhin's Pinax and had much of it completed prior to 1703. He had urged Tournefort to complete the task when he assumed his diplomatic post, but as Tournefort died in 1708, the revision remained undone. With the arrival of Catesby collections from Virginia, coupled with the large number of species described since 1703, Sherard once again turned his attention to the Pinax revision.

An aspect that certainly aided Sherard in this matter was the annotations Sherard found on the Catesby specimens. Dale had attempted to keep up with the synonymy of his day, and many of Catesby's specimens he had been able not only to identify but assign synonymies as well. Nonetheless, fully half of what Mark Catesby brought with him was new.

Catesby was certainly in the mold of Banister. He made careful notes and field sketches -- which may still be examined today on his specimens -- and knew what had been gathered in Virginia previously as well. Catesby knew that the coastal plain had been well collected, not only by Banister and others who had been in Virginia, but Jones, Krieg and Vernon in Maryland. He proceeded to work further inland, and even went into the mountains.

Upon his return to England in 1719, Catesby was well known, but only to Dale, Petiver and a few other members of the Royal Society. Through a series of well placed letters with rather blunt hints, and a careful distribution of herbarium specimens, Dale managed to impress critical members of the Society with the value of Mark Catesby as a collector. Within a few months, the Society was discussing the idea of sending Catesby back to the New World. As before it was necessary to find a position,

and to arrange for a group of supporters.

The Society had worked closely with Francis Nicholson in the past, and once again the members turned to him for help. Nicholson was now the Royal Governor to South Carolina, having been appointed to that post in 1720. In October Nicholson informed the Society that he would permit Catesby to come to the Colony and would provide him with an annual sum of 20 pounds per year.

The history of botanical explorations in the Carolinas prior to the time Mark Catesby arrived was one marked with the occasional visitor and residents interested in natural philosophies. Even so South Carolina contributed little compared to Virginia prior to 1720, and North Carolina was even less significant during that period of time. Various people gathered plants in the Carolinas with the help of James Petiver. Robert Stevens, who lived near Charles Town, sent plants and animals to Petiver starting in 1698. From the same area Edmund Bohun and Robert Ellis sent more plants to Petiver, and these were described by Petiver, and Plukenet, prior to 1705. A British sea captain, William Halsteed, also gathered plants from 1699 to 1703. The collections of Bohun and Ellis led to many significant additions to Petiver's volumes of dried plants.

One of the first women to actively collect in temperate North America was Hannah Williams of South Carolina. She sent a large collection of butterflies to Petiver in 1701 followed by a few plant specimens by 1705. These collections would have been more significant had they been published, but only a few ever saw the printed page, and most were lost to the botanical community when Petiver died in 1718.

One of the finest collections of Carolina plants ever received from the Carolinas prior to 1720 was made by the Reverend Joseph Lord. American by birth and educated at Harvard University, Lord was well known to the small circle of New England scientists active in that area before he went to South Carolina in 1695. He settled in Dorchester on the banks of the Ashley River, and under the guidance of Hannah Williams, began to collect plants in 1701. Lord's large and well preserved specimens are readily noted in Petiver's extant volumes of plant specimens because of their elegantly hand written labels.

Lord wrote yearly to Petiver and sent him specimens with nearly every letter until 1711. Many of Lord's collections were described by Petiver in his Gazophylacii naturae & artis, a series of pamphlets that were published from 1702 to 1709. In 1712, Petiver described a few of Lord's fern species in his Pterigraphia americana.

Another of James Petiver's Carolina correspondents was John Lawson. An apprentice in the London Society of Apothecaries before he went to North Carolina in 1701, Lawson was knowledgable in the art of collecting plants and securing information on the medicinal significance of exotic plant species. Although there was some initial correspondence between Lawson and Petiver in 1701, there was no major exchange until 1709 when Lawson published his own account of the natural history of North Carolina. This book was mainly an overview of the natural

history, topography and geology of the Colony, and although he traveled widely he seems to have made only a few collections prior to 1709. Lawson met Petiver when he was in London shortly before his book was published. He was the Surveyor General of the Colony, in a position to explore, and both Petiver and George London encouraged him to send them specimens and seeds. A gift of several books and assorted items necessary to gather animals, insects and plants helped to solidify their relationship. During Lawson's surveying of the Virginia and North Carolina boundary, he was able to gather many specimens and to enrich Petiver's holdings of plants, insects, snakes, birds and fossils. In 1711 Lawson was hoping to collect extensively and wrote Petiver of his plans. Unfortunately he was captured by Tuscarora Indians who were displeased with his attitude toward them and killed him. His last book of plants had been sent to Petiver but two months prior to his death in September of 1711.

John Lawson's A new voyage to Carolina proved to be a successful publication and greatly strengthened his place in history. Unfortunately this travel account does not contain information on the plants of the Colony in a form useful to subsequent generations of taxonomists and he was destined to play no role in the future of systematic botany.

When Catesby came to the New World in May of 1722, he was already well known for his knowledge of plants and animals. The community of Charles Town, South Carolina, was one place where naturalists were considered an asset.

Catesby left London well sponsored with the financial support of not only the Royal Governor but that of four noble peers of the realm and a number of English gentlemen naturalists, notably Sloane, Dale, William Sherard and Mr. Charles Du Bois, the secretary to the East India Company. His efforts were sanctioned by the Royal Society and carried out with the unofficial but nonetheless important approval of the Temple Coffee House Botany Club. As he had done in Virginia, Catesby quickly established himself in the best of social circles in Charles Town, and became an influencial member of the Colony.

Catesby traveled widely in the Carolinas, visiting both North and South Carolina, portions of Georgia, and even northern Florida. He went westward as far as the Piedmont. In the winters he often went to Bermuda and Bahama collecting and illustrating the plants he encountered. He gathered many different kinds of seeds and fruits which he sent to England, and these were rapidly incorporated into the gardens of western Europe. He gathered all objects of nature he could find -- animals of all kinds, fossils, plants of nearly every type -- and managed to make notes on geology, anthropology and ecology. Pleased with his efforts in the Carolinas, he attempted to encourage his London supporters to finance an expedition to Mexico, but this proved impossible. When the term of Francis Nicholson ended in 1725, Catesby traveled to Bermuda where he spent nearly a year, and then, in 1726, continued on to England.

Upon his return to London, Catesby immediately set to the task of publishing his New World discoveries. He

proposed to his supporters that he begin to prepare a volume on the natural history of the areas he had visited. Unfortunately for Catesby, his supporters in London were no longer willing to provide him with the means to pursue his goal, now that he was not providing them with specimens, and he was forced to find other means. Faced with this problem, Catesby learned to etch his own copper plates for the proposed colored illustrations which he then had to paint himself. He found work in various nurseries where he was able to observe many of his own species growing in cultivation and was able to adjust his illustrations and descriptions accordingly. With a no-interest loan from Peter Collinson, Catesby was able to proceed and finally release, in parts, his Natural history of Carolina, Florida, and the Bahama Islands.

Initially, William Sherard at Oxford assisted Catesby in the preparation of his text, and especially with the complex nomenclature. Given that many of Catesby's American plants had previously been described based on Virginia, Maryland and New England collections, Sherard's knowledge of these plants was valuable.

Catesby's close relationship with Sherard caused him some minor difficulties in his friendship with Sir Hans Sloane. While Catesby had been in the New World collecting for his English patrons, they had been waring among themselves over his material. This battling was most fiercely waged between Sloane and Sherard. To a large degree this was only a manifestation of their longer and more serious disagreement over the access Sherard requested of the many collections of plants Sloane had acquired. In particular, Sherard wanted access to the collections formerly owned by James Petiver. Sherard's work on his revision of Bauhin's Pinax had been delayed by his inability to thoroughly study Petiver's many collections. By the early 1720s, this became a major source of difference between the two men.

In 1721, Sherard asked a German botanist, John Jacob Dillenius, to come to England and assist him in completing the Pinax project. Sherard lived in London at the time, and had asked Sloane on numerous occasions to be allowed to review the Petiver collections so he could complete his revision. Sloane initially refused saying that the Petiver material was too disorganized and as soon as he had it in order Sherard could see it. When Sherard finally did get an opportunity to examine Petiver's collections, he complained that Sloane had so ill treated them that they were essentially useless. Their dispute over access to the Petiver collections continued for years, and when Sherard died in 1728, the feelings of ill-will were passed -- in a less intensive form -- to Dillenius.

Dillenius did what he could with the Petiver polynomials, and other scientific names proposed by Plukenet (Sloane had his collections as well) and others. By using the herbarium at Oxford, and the expertise of Dillenius, Catesby was able to associate his material with species previously described by Ray, Plukenet, Petiver and others. This was aided by Samuel Dale's own annotations of Catesby specimens that had come to England while Catesby was still exploring. As a result, Dale, who had Ray's personal herbarium, had been able to

accurately name many of Catesby's specimens based on his own knowledge of the Virginia and Maryland flora for he had duplicates of many of those species in his own herbarium.

By the spring of 1729 Catesby had completed the first portion of his book and began to release it as sets of numbered plates with the idea that the book be assembled later when it was completed. He presented each set of plates to the Royal Society, and by November of 1732 had given the Society all the parts that constituted the first volume. It was Collinson who finally presented Catesby to the Society for membership which was granted in May of 1733.

Parts for the second volume began to appear in January of 1735, and Catesby continued to give each part to the Royal Society until all parts were completed in December of 1743. In 1747 he published an appendix and Collinson was able to write to Linnaeus that Catesby's book was completed. By this time the number of contributors to Catesby's project had grown to 166, well above the original 12 men who had provided him with his initial funding. Included among his large list of patrons were a number of royal families, ambassadors, botanical friends and colleagues. Perhaps most significant was the number of supporters from the American colonies. The final book contained 200 colored plates of which 171 plants were figured.

Catesby's three-year effort in South Carolina has come to be regarded as one of the most significant in American natural history explorations. He has come to be regarded as one of the more skilled observer. Catesby was only an adequate illustrator, but the combination of his art work and his ability to observe plants and animals has been appreciated by many since 1747, including Linnaeus.

THE LINNAEAN ERA

For temperate North American botany, the Linnaean era began when Carl Linnaeus came to England. He came to examine the collections of dried plants that had been gathered in the New World by the host of collectors starting with John Banister and essentially ending with Mark Catesby. For Linnaeus, Catesby's work was highly significant. The full text of volume one and much of the second had been printed when Linnaeus visited Dillenius in August of 1736. At Oxford, Linnaeus could not only examine the plates, but the actual specimens as well for Sherard and Dillenius had received nearly a full set of Catesby's specimens. In addition, Linnaeus could examine collections made by earlier naturalists, now annotated by Sherard and Dillenius with the polynomials proposed by various workers up to the mid-1730s. Previously in Sweden, Holland and France Linnaeus had been able to see garden material, and had been able to characterize many of the New World species on the basis of these plants. He continued to examine garden material, including the botanical garden at Oxford, but it was his examination of herbarium material that proved critical to his understanding of the application of polynomials.

Linnaeus' visit to England made it possible for him not only to see many collections which he had been unable to study previously, but also gave him an opportunity to talk with many of the men who had been supporting

explorations throughout the world. He visit Sir Hans Sloane briefly but did not examine his herbarium. He formed a bond with Peter Collinson and James Ellis which was to carry him through the difficult period of acceptance of the Linnaean methodology in England after 1753.

While Linnaeus certainly concentrated upon the collections made by Catesby and others who collected in the southern portion of the eastern seaboard, he did see a few collections made by collectors from the New England area and eastern Canada. Botanical explorations had been occurring in the north while similar activities were being carried out in the south. John Josselyn was one of the first naturalist to visit this area, traveling to the present state of Maine in 1638 and 1639. On this trip he had little time to observe plants and animals, but on a much longer trip, lasting from 1663 to 1671, Josselyn had amply opportunity to make observations. He was primarily interested in medicinal plants of the area, and discovered that the herbals of his day were inadequate in dealing with the New England vegetation. He made no permanent collections and apparently failed to gather seeds of the plants he saw. Nonetheless, Josselyn prepared a small book with rather crude and poorly executed illustrations of the New England flora. Entitled New-England's rarities discovered, his book was published in 1672; it proved to be of little interest to Linnaeus and it is not mentioned in Species plantarum.

Other collectors came to the New England area, but few were of major importance. Thomas More, the so-called "Pilgrim Botanist", came to New England in 1722 and stayed until 1724. When five Mohawk chiefs were sent to England in 1709, More apparently met them and received an invitation to visit them in the New World. He had worked with Bobart at Oxford in the 1690s, and had collected for Lhwyd in southwestern England in the 1700s. He was an enthusiastic collector, and Petiver, Sloane and others encouraged him to go to America. It was Sherard who secured the funds for More to travel, but had some difficulties in finding supporters for a man in his 40s.

More proved not to be as successful a collector as William Sherard and his supporters had hoped. Nonetheless More's many collections were in the Sherardian Herbarium at Oxford University when Linnaeus visited it in 1736. So too were the Hudsons Bay collections of Richard Tilden who had visited the area in about 1700. These collections were likely the only plants from northern Canada that Linnaeus examined in the herbarium.

No doubt Linnaeus and Dillenius, who initially began their association with a profound distrust of the other, discussed Dillenius book Hortus elthamensis which had been published in 1732. Dillenius had discussed nearly 400 species grown in the garden of James Sherard, the brother of William Sherard. Dillenius had served Sherard up to his death in 1728 with a high degree of devotion, and hoped to complete the revision of the Pinax which Sherard had so long struggled to see done. Shortly after William's death, James asked Dillenius to prepare a book on his garden. Dillenius, the first Sherardian Professor at Oxford was reluctant to do it, but bowed to the will of the wealthy James and devoted several years to the book. The Hortus

was well illustrated and well written with abundant information on the distribution and taxonomy of each species mentioned. It was a major work and Linnaeus recognized it as such almost immediately. At Oxford, Linnaeus was able to review both the garden and herbarium specimens Dillenius had used in arriving at his taxonomic disposition of the species he treated. Included in the Hortus were a number of Banister and Catesby species as well as a few grown from seed gathered in Maryland. The synonymy was rather complete, and Linnaeus could examine the herbarium specimens annotated by Sherard, Dale, Dillenius, and even Ray, Plukenet and Petiver, and trace the evolution of the species definitions Dillenius had arrived at. Linnaeus remained at Oxford for some eight days. It was here he studied the extant collections of American plants which aided him when he assisted Johann Friedrich Gronovius during the winter of 1737-1738 in classifying a large collection of plants from Virginia gathered by John Clayton.

CLAYTON AND KALM

Colonial Virginia of John Clayton's era was different from that Mark Catesby had found in 1712. The population was growing and the urban centers, once restricted to the Williamsburg area, had expanded far beyond the James River. There was a college, William and Maryland, newspapers in the Colony -- something that was not even yet in the city of Oxford in England. The intellectual center that had once been Williamsburg was now divided between Boston, Philadelphia and Charles Town. Virginia still held great families, and most were deeply interested in botany and the other natural philosophies. Some maintained large gardens and were exchanging plants not only with European centers, but even with other colonists elsewhere in the New World.

Clayton came to Virginia in 1720, joining his father who was in the government and would eventually rise to be the Attorney General. Clayton acquired land and became an established, although modest, man of means. He too became a government official serving as the Clerk of Gloucester County where he lived. Like other Virginians, Clayton established a garden and entered into a correspondence with William Byrd II, Mark Catesby who he had met, Peter Collinson, and John Bartram. It was Catesby that sent Clayton's herbarium specimens to Gronovius, and others, and urged Gronovius to carefully review them with the hopes of classifying them.

In the 1730s Clayton prepare a manuscript entitled "A catalogue of plants, fruits, and trees native to Virginia" and sent it to Gronovius. Taking the manuscript, and the many Clayton specimens which had been gathered since the early 1730s, Gronovius and Linnaeus began to prepare a manuscript on the collection following Linnaeus' new system of classification rather than that of Ray's which Clayton had followed. Linnaeus worked closely with Gronovius on the nomenclature of the Virginia species he was publishing. The knowledge Linnaeus had gained from his visit to Oxford where he examined so many of the temperate North American plants proved to be useful to him in naming the plants gathered by John Clayton and assigning synonymies to them. The resulting book, Flora virginica, appeared in two parts. The first part was published in 1739, while the second was released in 1743. Linnaeus

was closely involved with the 1739 volume, but had little direct influence on the 1743 volume.

When Clayton saw Gronovius' Flora virginica, he was profoundly disappointed. Not only had Gronovius not followed his manuscript, he failed to acknowledge Clayton's contribution to the Flora except for a minor comment in the introduction. To remove this as a possibility from happening again, Clayton began to study the Linnaean methodology with the hopes of writing his own flora of Virginia. Within a few years he was able to write his fellow naturalists commenting on various technical points in their descriptions, and he turned his attention to writing. In 1748, Clayton traveled into the high mountains collecting many new species which were as yet unknown to Linnaeus. In 1757, Clayton sent to Peter Collinson his revision of Flora virginica, but could not find a publisher. Collinson asked George Ehret to prepare plates for the volume, and some were actually prepared before Laurenz Gronovius, the son of Johann, published his father's long delayed second edition in 1762. The book forced Clayton and Collinson to abandon their project, and Clayton's revision was never published.

Clayton had proposed to use Linnaeus' binomial system of nomenclature, and this plus the Ehret plate would have made his flora a major publication. The younger Gronovius did not illustrate his work, nor did he use binomial nomenclature, and thus this post-1753 flora is of no systematic importance and is little used today.

A causal friend of John Clayton's was John Mitchell, a man of many talents and broad scientific interests. He was in Virginia from 1735 to 1746, returning to England because of his ill health. He also maintained a large and active correspondence with many contemporary scientists including botanists such as Dillenius, Gronovius and Linnaeus. He knew John Bartram as well and communicated with Cadwallader Colden in New York, Peter Collinson in London, and even two of his fellow American collectors, Mark Catesby and Peter Kalm.

Mitchell's interests in botany were somewhat limited compared to his contributions made in other areas of the natural and physical sciences. Nonetheless he sent numerous herbarium specimens to Dillenius and Collinson, along with various manuscripts. One of those papers was published for him by Collinson in 1748; it was titled "Nova genera plantarem Virginiensum." This work was consulted by Linnaeus and various of Mitchell's new genera were mentioned or treated in the first edition of Species plantarum.

Of perhaps greater interest were Mitchell's comments regarding species and speciation. He proposed that plants and animals that can produce offsprings biologically ought to be considered members of the same species, whereas those that cannot produce offsprings or the off-spring are sterile, ought not to be regarded as the same species. Mitchell felt Linnaeus' artificial system was unreliable, and that Ray's system was much more natural as it was based on attributes of the whole plant rather than just the reproductive parts.

Even though Mitchell sent the bulk of his plant collection to England in 1738 and in 1742, he continued to botanize

in Virginia. When he departed in 1746, he took more than a thousand specimens. Unfortunately, his ship was stopped by a Spanish vessel carrying pirates and the contents plundered. Although Mitchell was eventually able to recover the majority of his collection, most of it was no longer useful and was discarded.

Both Mitchell and Clayton correspondent with Cadwallader Colden of New York. Colden had initially come to America in 1715. Born in Ireland of Scotish parents and educated at the University of Edinburgh, he studied medicine in London before going to Philadelphia where he practiced medicine among other enterprises. Colden became a correspondent of James Petiver but apparently never sent him any plant collections. He returned to Scotland in 1715, married, and returned to Philadelphia where he continued to practice. However, in 1720, Colden was appointed Surveyor General for New York, and he moved to that Colony where he entered into a life of politics.

As a result of his position, Colden was able to become wealthy through land speculation, and was slowly able to amass an excellent scientific library. His correspondents were the "who's who" of American and European science, with Collinson, Gronovius and Linnaeus among his European associates, and the Bartrams, Clayton, Mitchell, and a host of others who would be important after 1753 among his American friends.

In 1739, Colden and his family left New York City and moved to an estate he named Coldengham. Here he was able to write on a wide variety of subjects, including botany. Colden began to study the Linnaean method in the early 1740s, and with a visit from John Bartram in 1742, Colden began to seriously study the local flora. He collected plants around Coldengham and sent them to Collinson, and even Linnaeus. Soon he was attempting to prepare a flora of New York, but mostly it was a treatment of plants in his local area. Published from 1743 to 1750, in parts, Colden's "Plantae Coldenhamiae in provincia Novaboracensi Americanes sponte Crescentes" was used by Linnaeus to characterize a few species in 1753.

Colden, like Mitchell, found fault in Linnaeus' sexual system, and voiced his disagreements about it to Gronovius. Within a few years, Colden's interest in botany had lessened, but he was pleased to discover that his curiosity in botany had passed onto his daughter, Jane.

Jane Colden began her studies of botany about the time Species plantarum appeared in print, and by 1755 her father wrote to Gronovius of her pronounced skills. What correspondence he was receiving on botany, Cadwallader passed on to Jane. She exchanged seeds and specimens with several American and European naturalists, and entered into her own correspondence with a number of new naturalists, such as Alexander Garden, of Charles Town, South Carolina, who, like herself, would be a significant contributor to Linnaeus' subsequent editions of Species plantarum. She prepared a "Flora of New York" with some 340 illustrations, but the work was never published during her lifetime. It now appears that this failure was more one of her sex than her ability.

Both of the Coldens knew John Bartram. Of all the

Linnaean era collectors in temperate North America, John, and his son William, collected more widely than any other naturalist. Born in Pennsylvania of Quaker parents in 1699, he moved at an early age to North Carolina where he remained until a young man. Upon the death of an uncle, Bartram inherited a small farm near Darby, Pennsylvania, where he moved. After the death of his first wife in 1827, John and his only surviving son moved to a new farm on the Schuylkill River, a short distance from Philadelphia, and established a small but significant botanical garden on about five acres.

Bartram prospered in his farming, married again, and he was able to expand his land holdings so that he could eventually devote much of his personal time to botany and horticulture. Bartram soon began to explore the field of botany, mainly from the aspect of medicinal plants, learned to read Latin, and to read Linnaeus' writings as they became available in America. He also learned to read and write English, and while neither his English or Latin were perfect, he managed, and became an active participant in the scientific circles that dominated the lives of a handful of men in the Philadelphia area.

Like so many others, Bartram began to correspond with Collinson in the 1730s, and to exchange specimens. Some of his collections of dried plants went to Dillenius at the University of Oxford, and these Linnaeus likely saw in August of 1736. Collinson became an enthusiastic supporter of Bartram and encourage all who went to America to met him. He also encourage John Bartram to travel and collect plants which would be of potential value to the horticultural gardens of Europe. By 1738 Bartram was proposing to Collinson to make a major botanical expedition into Virginia, and to this Collinson added even more encouragement in the form of letters of introduction, instructions and advice of the art of collection live specimens, seeds and herbarium specimens. Soon Bartram seeds were sprouting in the Oxford Botanical Garden as well as at the Chelsea Physic Garden. Within a few years Collinson had established a network of supporters for Bartram, and as the years past, Bartram made more and more exciting discoveries of unique species heretofore unknown in the scientific world.

Many of Bartram seeds found their way to Linnaeus' garden at Uppsala, and through them, Linnaeus was able to describe new species of American plants. Bartram was now traveling widely in the eastern part of temperate North America, visiting not only the more remote regions along the coastal plain but the high mountains to the west. He made repeated visits into the colonies of New Jersey, Delaware and Maryland, as well as numerous trips to various parts of Pennsylvania. He traveled into New York, met Colden, and collected in the Catskills. He even went into southern Canada.

The Bartrams continued to collect well past 1753, and John and his son William soon became well known for their fine plants and exotic travels to the more remote regions of the eastern seaboard. The two men rose to fame, with John being appointed the Royal Botanist in 1765. Their 1765 expedition to Florida has become famous due to John's book published the following year.

A visitor to the Bartram

farm in the summer and fall of 1748 was Peter Kalm. A student of Linnaeus', Kalm came to America in September of 1748 with the intention of collecting dried herbarium specimens and seeds for his major professor. During his first fall he gathered seeds and plants in Pennsylvania and New Jersey, while during the summer he turned northward to New York and southern Canada returning to Philadelphia for the winter of 1749-1750. Kalm then traveled from New Jersey across western Pennsylvania to the eastern Great Lakes, collecting numerous specimens before his return to the city of Brotherly Love in October of 1750. From there, in February, 1751, Kalm sailed for England, and then on to Sweden where he arrived, laden with many new and wonderous plants, upon his professor's door at Uppsala in June.

SPECIES PLANTARUM

For Carl Linnaeus, the idea of a treatment of all the species of the world began initially in 1733 when he first attempted the project. Almost at once he realized it was impossible to do at that time and turned to describing the genera instead. This effort resulted in the publication of Genera plantarum published in 1737. He then took a copy of his new book, added blank pages, and began to insert species. From 1746 to 1748 Linnaeus worked on a new draft of Species plantarum following the format he had used in his earlier (1738) Hortus cliffortianus. This proved equally impossible but for somewhat different reasons.

Much as Morison, Sherard and Dillenius realized the need for a new edition of Bauhin's Pinax, so too did Linnaeus when it came to evaluating the vast number of polynomials that had been published since 1623. The prospects of producing such a work was essentially nil. Dillenius had been unable to complete the work, and no doubt Linnaeus knew of the difficulties he had had and did not see any way of resolving them himself. Linnaeus did not see himself traveling now to London and reviewing the many collections or publications associated with the writings of Ray, Plukenet and Petiver, and it was these writers, in large part, whose nomenclature was uncertain and confusing. Certainly Linnaeus had been able to resolve some problems when working Gronovius' Flora virginica, but all of these men had published new species from all over the world. Particularly troublesome was Petiver who had described plants not only from the Carolinas and Florida of North America, but species from the interior of China, far off Japan, and remote regions of Africa. Linnaeus could not have a complete list of synonymy for each and every name; he had to rethink his manuscript and what he hoped to accomplish.

Linnaeus completed about a third of his proposed Species plantarum from 1746 to 1748 when he once again set the manuscript aside. He had not yet adopted the binomial system of nomenclature, and other duties prevented him from devoting the kind of time needed to do the work. Thus the book remained until June of 1751 when Kalm returned with his collections.

Perhaps spurred by Kalm, Linnaeus once again started on Species plantarum. By this time he had conceived of the handy index device of proposing a trival name -- what we today call the species epithet -- to go along with the cor-

rect scientific phrase name by which each species should be known. He realized that he had to shorten his synonymy and could economically treat the world's flora only by having brief statements as to the distribution of each kind and a phrase name that did not exceed two lines of print. Taking his 1746-1748 draft, Linnaeus managed to rewrite the first 67 printed pages of his book in eight days. By November of 1751 Linnaeus had completed the first part (or volume), and by March, 1752, three-quarters of the text was written. In July, 1752, or some 13 months after beginning, Linnaeus completed the text for Species plantarum.

It is obvious that Linnaeus went quickly through the early sections of part one, and took most of his information from his previously written manuscript. Only a few Kalm collections were cited, and occasionally the same species is described later in the book -- in its correct position according to Linnaeus' scheme of classification -- with Linnaeus not realizing he had already treated that plant. As one proceeds through the text, Linnaeus became more exact in the citation of geographical location, his dependency upon Kalm collections for species from temperate North America increased, and he became more critical of his circumscription of genera. However, toward the latter third of the book, as Linnaeus' health began to fail and he began to hurry, he once again is not as careful and more errors appear. Species plantarum is filled with errors, omissions and an occasional strange statement. Linnaeus occasionally miscites places of publication, wrong page numbers or the incorrect figure or plate. In some instances Linnaeus gives seemingly bizarre polynomials in synonymy, as in the case of the two Maryland-based polynomials he cites under Osmunda cinnamomea. A simple reading of the Latin would quickly show that these names ought to apply to O. claytoniana, yet Linnaeus puts them where he did. In large part this was likely due to his observation of specimens of O. cinnamomea at the Sherardian Herbarium at the University of Oxford where the names are given on the labels. However, there are also collections, from Maryland, of O. claytoniana with these same names also listed, so it is difficult to understand his treatment of these polynomials.

When the first edition of Species plantarum appeared in 1753, the botanical community did not immediately jump onto the Linnaean binomial bandwagon. His system of classification had long been criticized, and his critics were not immediately willing to embrace all of his radical departures from the established norm. It is important for modern workers to remember that even Linnaeus did not regard his trival names as anything more than a convinient means of index his book. Philip Miller, the English gardner who had published his Gardners dictionary for years, did not use binomials until 1768 -- and then only in this one edition -- mainly because his book was already alphabetically arranged and did not need an index.

The impact of Linnaeus' Species plantarum was slowly felt. When copies finally arrived on the American continent, some workers immediately adopted the idea of binomials. Jane Colden in her unpublished book used them, as did the Bartrams. Alexander Garden used binomials when the species were known to him, but

otherwise used phrase names in his correspondence. With the appearance of the second edition of Species plantarum in 1762 and 1763, the trend to binomials was largely established. This new edition contained many new and exciting plants that Linnaeus had received from Jane Colden, Alexander Garden, John and William Bartram, and others who were now exploring and collecting in temperate North America. Not only would Linnaeus describe these species, but others, working elsewhere in Europe, would pen validly published scientific names to these collections and they too would rise in the world of systematic botany.

With the opening of the vast lands to the west of the Appalachian Mountains, the end of French and Indian War in America, and the growth of resident naturalists in America, the field of plant taxonomy and discovery would expand rapidly soon leaving behind even Linnaeus for a new generation of taxonomists.

SUMMARY OF SPECIES PLANTARUM

One cannot understate the impact Linnaeus had upon systematic botany. His work, and especially his first edition of Species plantarum have, by international agreement, become highly significant to all modern-day workers in the field of systematic botany. Nonetheless, a careful evaluation and summation of Linnaeus' state of knowledge regarding the vascular plants of temperate North America as defined by Linnaeus in 1753 has not been attempted. In the following section such a review will be made. It is necessary first to prepare listings of species, workers and publications by categories, and then to comment on these findings. The following categories will be given:

1--All species mentioned in the first edition of Species plantarum with direct or indirect indication as being in temperate North America. This will include obvious errors made by Linnaeus.

2--A breakdown of these species into distributional groups as reported by Linnaeus, listing first those which Linnaeus considered to occur only in temperate North America; those which occur in this area but also occur elsewhere in the New World; those that occur in temperate North America and elsewhere in the world; and finally, those which Linnaeus does not specifically state to occur in temperate North America, but gives a synonym or reference based upon a temperate North American collection.

3--A listing of vascular plants species named for geographical regions in temperate North America.

4--A listing, with the collection numbers insofar as possible, of the Clayton collections Linnaeus indirectly cites when he gives Gronovius' Flora virginica among the list of publications he cites. In some instances Gronovius is basing his information upon a collection made by someone other than Clayton, and this can be discovered only by consulting the Gronovius herbarium now at the British Museum (Natural History) in London. In perhaps a few other instances, Gronovius may not have had a collection in hand, but garden material or information about a particular species in temperate North America and reported it. Most of these particular kinds of instances can be seen for those species which lack a Clayton collection number. However, it must be immediately noted that Clayton did send some specimens without collection numbers, and in some

cases Gronovius failed to give the number in his publication, so it cannot be assumed that in all instances where there is no number that this reference is based on something other than a Clayton sheet. The first list is by species name; the second list is by collection number.

5--A listing of seemingly Kalm collections taken not only from statements in Species plantarum, but from Linnaeus' herbarium at the Linnean Society in London. This is to be regarded as an imcomplete listing, as it will require a more careful examination of Kalm collections housed elsewhere, and a comparison of those specimens with others in Linnaeus' herbarium before a more finalized list can be completed.

6--A listing of major publications cited by Linnaeus for those species which, in Linnaeus' opinion, were endemic to temperate North American in their distribution. Species with a more widespread distribution are not reviewed at this time.

7--A list of synonymies for some of the vascular plant species reported for temperate North America in Linnaeus' first edition of Species plantarum.

The review that follows is based upon observations obtained from these listings. In all instances they should be considered somewhat tentative as it has not been possible to correct errors made by Linnaeus, especially in the citation of literature, nor to review fully the holdings in the British Museum (Natural History) of the Gronovius herbarium. Until these and other similar tasks are completed it will be impossible to fully report on all aspects relative to the first edition of Linnaeus Species plantarum.

Vascular Plants from Temperate North America Mentioned in Linnaeus' First Edition of Species Plantarum

Acalypha virginica
Acer negundo
Acer pensylvanicum
Acer rubrum
Acer saccharinum
Acnida cannabina
Acrostichum areolatum
Acrostichum platyneuros
Acrostichum polypodioides
Actaea racemosa
Actaea spicata var. alba
Adiantum pedatum
Aesculus pavia
Agave virginica
Ageratum altissimum
Agrimonia eupatoria
Agrostis virginica
Aletris farinosa
Alisma cordifolia
Alisma subulata
Allium canadense
Alsine media
Alyssum hyperboreum
Amaranthus graecizans
Amaranthus hybridus
Amaranthus hypocondriacus
Amaranthus lividus
Amaranthus retroflexus
Amaranthus spinosus
Amaryllis atamasca
Ambrosia artemisiifolia
Ambrosia elatior
Ambrosia trifida
Ammannia ramosior
Amorpha fruticosa
Anchusa virginiana
Andromeda arborea
Andromeda calyculata
Andromeda mariana
Andromeda paniculata
Andromeda racemosa
Andropogon alopecuroides
Andropogon divaricatum
Andropogon hirtum
Andropogon nutans
Andropogon virginicum
Anemone dichotoma
Anemone hepatica
Anemone quinquefolia
Anemone thalictroides
Anemone virginiana
Angelica atropurpurea
Angelica lucida
Angelica sylvestris
Annona glabra

Annona muricata
Annona triloba
Anthericum calyculatum
Antirrhinum canadense
Antirrhinum elatine
Aphanes arvensis
Apocynum androsaemifolium
Apocynum cannabinum
Aquilegia canadensis
Arabis canadensis
Arabis lyrata
Aralia nudicaulis
Aralia racemosa
Aralia spinosa
Arbutus uva-ursi
Arenaria rubra var. marina
Arethusa bulbosa
Arethusa divaricata
Arethusa ophioglossoides
Aristolochia arborescens
Aristolochia serpentaria
Arnica maritima
Arum dracontium
Arum triphyllum
Arum virginicum
Arundo phragmites
Asarum canadense
Asarum virginicum
Asclepias amoena
Asclepias decumbens
Asclepias incarnata
Asclepias nivea
Asclepias purpurascens
Asclepias rubra
Asclepias syriaca
Asclepias tuberosa
Asclepias variagata
Asclepias verticillata
Ascyrum crux-andreae
Ascyrum hypericoides
Ascyrum villosum
Asplenium rhizophyllum
Aster annuus
Aster concolor
Aster cordifolius
Aster divaricatus
Aster dumosus
Aster ericoides
Aster grandiflorus
Aster laevis
Aster linariifolius
Aster linifolius
Aster miser
Aster mutabilis
Aster novae-angliae
Aster novi-belgii
Aster puniceus
Aster rigidus
Aster tenuifolius
Aster tradescantii
Aster undulatus
Aster vernus
Astragalus canadensis
Astragalus carolinianus
Atriplex halimus
Atriplex laciniata
Avena pensylvanica
Avena spicata
Azalea lutea
Azalea viscosa

Baccharis foetida
Baccharis halimifolia
Baccharis ivaefolia
Bartsia coccinea
Betonica annua
Betula lenta
Betula nigra
Bidens bipinnata
Bidens bullata
Bidens frondosa
Bidens nivea
Bidens pilosa
Bignonia caerulea
Bignonia capreolata
Bignonia catalpa
Bignonia crucigera
Bignonia radicans
Bignonia sempervirens
Briza eragrostis
Bromus ciliatus
Bromus purgans
Buchnera americana
Bunias cakile
Buphthalmum frutescens
Buphthalmum helianthoides
Burmannia biflora

Cacalia atriplicifolia
Cacalia porophyllum
Cacalia suaveolens
Cactus opuntia
Cactus pentagonus
Caesalpinia brasiliensis
Callicarpa americana
Callitriche palustris
Caltha palustris
Campanula americana
Campanula perfoliata
Canna glauca
Cardamine virginica
Carduus altissimus
Carduus virginianus
Carex folliculata
Carex pseudocyperus
Carex squarrosa
Carpinus betulus
Carpinus ostrya
Cassia chamaecrista
Cassia ligustrina

Cassia marilandica
Cassia nictitans
Cassine peragua
Ceanothus americanus
Celastrus bullatus
Celastrus myrtifolius
Celastrus scandens
Celosia paniculata
Celtis occidentalis
Cenchrus tribuloides
Cephalanthus occidentalis
Cerastium semidecandrum
Cercis canadensis
Chaerophyllum arborescens
Chelidonium glaucium
Chelone glabra
Chelone hirsuta
Chelone penstemon
Chenopodium album
Chenopodium anthelminticum
Chenopodium virginicum
Chionanthus virginica
Chironia angularis
Chironia campanulata
Chironia dodecandra
Chrysanthemum arcticum
Chrysanthemum serotinum
Chrysocoma graminifolia
Chrysogonum virginianum
Chrysosplenium oppositifolium
Cicuta bulbifera
Cicuta maculata
Cinna arundinacea
Circaea lutetiana
var. canadensis
Cissampelos smilacina
Cistus canadensis
Claytonia virginica
Clematis crispa
Clematis viorna
Clematis vitalba
Clethra alnifolia
Clinopodium incanum
Clinopodium rugosum
Clinopodium vulgare
Clitoria mariana
Clitoria virginiana
Coix dactyloides
Coix lacryma-jobi
Collinsonia canadensis
Commelina communis
Commelina erecta
Convallaria polygonatum
Convallaria racemosa
Convallaria stellata
Convolvulus carolinus
Convolvulus hederaceus
Convolvulus panduratus
Convolvulus repens
Convolvulus spithamaeus
Conyza asteroides
Conyza bifrons var. flosculosa
Conzya linifolia
Coreopsis alternifolia
Coreopsis angustifolia
Coreopsis auriculata
Coreopsis lanceolata
Coreopsis tripteris
Coreopsis verticillata
Cornus canadensis
Cornus florida
Cornus sanguinea
Cracca virginiana
Crataegus coccinea
Crataegus crus-galli
Crataegus tomentosa
Crataegus viridis
Crescentia cujete
Crotalaria alba
Crotalaria perfoliata
Crotalaria sagittalis
Cucubalus stellatus
Cupressus distichia
Cupressus thyoides
Cuscuta americana
Cynanchum hirtum
Cynanchum suberosum
Cynoglossum virginianum
Cynosurus aegyptius
Cyperus arundinacea
Cyperus odoratus
Cyperus strigosus
Cypripedium calceolus

Dactylis cynosuroides
Dalibarda repens
Datisca hirta
Datura stramonium
Daucus carota
Dianthera americana
Dianthus plumarius
Diodia virginiana
Dioscorea villosa
Diospyros virginiana
Dipsacus fullonum
Dirca palustris
Dodecatheon meadia
Dolichos polystachyus
Dolichos regularis
Draba verna
Dracocephalum virginianum
Dracontium foetidum
Drosera rotundifolia

Elatine hydropiper
Elephantopus scaber
Elephantopus tomentosus
Elymus canadensis
Elymus hystrix
Elymus virginicus

Epigaea repens
Epilobium hirsutum
Equisetum arvense
Equisetum hyemale
Erigeron camphoratum
Erigeron canadense
Erigeron philadelphicum
Eriocaulon decangulare
Eriophorum virginicum
Eryngium aquaticum
Eryngium foetidum
Erythrina herbacea
Erythronium dens-canis
Eupatorium altissimum
Eupatorium aromaticum
Eupatorium coelestinum
Eupatorium hyssopifolium
Eupatorium perfoliatum
Eupatorium purpureum
Eupatorium rotundifolium
Eupatorium scandens
Eupatorium sessilifolium
Eupatorium trifoliatum
Euphorbia corollata
Euphorbia ipecacuanhae
Euphorbia maculata
Euphorbia polygonifolia
Euphorbia portulacoides
Euonymus americanus

Fagus pumila
Ferula canadensis
Fraxinus americana
Fumaria cucullaria
Fumaria sempervirens

Galax aphylla
Galium bermudense
Galium tinctorium
Galium trifidum
Gaultheria procumbens
Gaura biennis
Gentiana ciliata
Gentiana quinquefolia
Gentiana saponaria
Gentiana villosa
Geranium carolinianum
Geranium maculatum
Gerardia flava
Gerardia pedicularia
Gerardia purpurea
Geum virginianum
Gleditsia triacanthos
Glycine apios
Glycine bracteata
Glycine comosa
Glycine frutescens
Glycine tomentosa
Gnaphalium margaritaceum
Gnaphalium obtusifolium
Gnaphalium plantaginifolium
Gnaphalium purpureum
Gomphrena interrupta
Gomphrena serrata
Gratiola dubia
Gratiola virginiana
Guilandina dioica

Hamamelis virginiana
Hedera quinquefolia
Hedysarum canadense
Hedysarum canescens
Hedysarum frutescens
Hedysarum hirtum
Hedysarum marilandicum
Hedysarum nudiflorum
Hedysarum paniculatum
Hedysarum repens
Hedysarum violaceum
Hedysarum virginicum
Hedysarum viridiflorum
Hedysarum volubile
Helenium autumnale
Helianthus angustifolius
Helianthus atrorubens
Helianthus decapetalus
Helianthus divaricatus
Helianthus giganteus
Helianthus laevis
Helianthus multiflorus
Helianthus strumosus
Heliotropium indicum
Helleborus trifolius
Helonias bullata
Heuchera americana
Hibiscus moscheutos
Hibiscus palustris
Hibiscus virginicus
Hieracium gronovii
Hieracium kalmii
Hieracium paniculatum
Hieracium venosum
Hippophae canadensis
Holcus laxus
Holcus striatus
Holosteum succulentum
Hordeum jubatum
Horminum virginicum
Houstonia caerulea
Houstonia purpurea
Hydrangea arborescens
Hydrocotyle americana
Hydrocotyle umbellata
Hydrophyllum virginianum
Hyoseris virginica
Hypericum ascyron
Hypericum canadense
Hypericum kalmianum
Hypericum lasianthus
Hypericum mutilum

Hypericum setosum
Hyssopus nepetoides

Ilex aquifolium
Ilex cassine
Impatiens noli-tangere
Ipomoea carolina
Ipomoea lacunosa
Ipomoea nyctelea
Ipomoea tamnifolia
Iris verna
Iris versicolor
Iris virginica
Isnardia palustris
Itea virginica
Iva frutescens

Juglans alba
Juglans nigra
Juncus bulbosus
Juncus campestris
Juncus effusus
Juncus filiformis
Juniperus virginiana
Jussiaea erecta

Kalmia angustifolia
Kalmia latifolia

Lactuca canadensis
Lamium amplexicaule
Laurus aestivalis
Laurus benzoin
Laurus borbonia
Laurus indica
Laurus sassafras
Laurus winterana
Lechea major
Lechea minor
Leontice thalictroides
Leontodon dandelion
Lepidium virginicum
Ligusticum scothieum
Lilium camschatcense
Lilium canadense
Limodorum tuberosum
Linnaea borealis
Linum virginianum
Liquidambar peregrina
Liquidambar styraciflua
Liriodendron tulipifera
Lithospermum virginianum
Lobelia cardinalis
Lobelia cliffortiana
Lobelia inflata
Lobelia kalmii
Lobelia siphilitica
Lonicera marilandica
Lonicera sempervirens
Lonicera symphoricarpos
Ludwigia alternifolia
Lupinus perennis
Lycopodium alopecuroides
Lycopodium apodum
Lycopodium carolinianum
Lycopodium complanatum
Lycopodium obscurum
Lycopodium rupestre
Lycopsis virginica
Lycopus virginicus
Lysimachia ciliata
Lysimachia punctata
Lysimachia quadrifolia
Lythrum lineare
Lythrum petiolatum
Lythrum verticillatum

Magnolia virginiana
Magnolia virginiana
var. acuminata
Magnolia virginiana
var. foetida
Magnolia virginiana
var. glauca
Magnolia virginiana
var. grisea
Magnolia virginiana
var. tripetala
Malva caroliniana
Medeola virginiana
Medicago virginica
Melanthium virginicum
Melica altissima
Melissa nepeta
Melissa pulegioides
Melothria pendula
Menispermum canadense
Menispermum carolinum
Menispermum virginicum
Mentha canadensis
Mentha spicata var. viridis
Mentzelia aspera
Mespilus arbutifolia
Mespilus canadensis
Mimulus ringens
Mitchella repens
Mitella diphylla
Mollugo verticillata
Monarda ciliata
Monarda clinopodia
Monarda didyma
Monarda fistulosa
Monarda punctata
Monotropa hypopithys
Monotropa uniflora
Morus rubra
Myosotis virginiana
Myrica asplenifolia
Myrica cerifera

Napaea dioica
Napaea hermaphrodita
Nepeta virginica
Nicotiana rustica
Nymphaea alba
Nymphaea lotus
Nymphaea lutea
Nymphaea nelumbo
Nyssa aquatica

Obolaria virginica
Oenothera biennis
Oenothera fruticosa
Oenothera mollissima
Oldenlandia uniflora
Onoclea sensibilis
Ophiorrhiza mitreola
Ophrys cernua
Ophrys lilifolia
Orchis ciliaris
Orchis flava
Orchis psycodes
Orchis spectabilis
Origanum vulgare
Ornithogalum bivale
Ornithogalum canadense
Ornithogalum hirsutum
Orobanche uniflora
Orobanche virginiana
Orontium aquaticum
Osmunda cinnamomea
Osmunda claytoniana
Osmunda regalis
Osmunda virginiana
Osteospermum uvedalia
Othonna cineraria
Oxalis longiflora
Oxalis stricta
Oxalis violacea

Panax quinquefolius
Panax trifolius
Pancratium carolinianum
Panicum capillare
Panicum clandestinum
Panicum crusgalli
Panicum dichotomum
Panicum dissectum
Panicum filiforme
Panicum glaucum
Panicum italicum
Panicum latifolium
Panicum sanguinale
Panicum virgatum
Parthenium integrifolium
Passiflora incarnata
Passiflora lutea
Penthorum sedoides
Phalaris oryzoides
Phaseolus helvulus
Philadelphus inodorus
Phlox divaricata
Phlox glaberrima
Phlox maculata
Phlox ovata
Phlox paniculata
Phlox pilosa
Phlox setacea
Phlox subulata
Phryma leptostachya
Physalis pruinosa
Physalis pubescens
Physalis viscosa
Phytolacca americana
Pinus balsamea
Pinus strobus
Pinus taeda
Pistacia simaruba
Plantago virginica
Platanus occidentalis
Poa capillaris
Poa compressa
Poa flava
Podophyllum diphyllum
Podophyllum peltatum
Polemonium caeruleum
Polemonium dubium
Polemonium rubrum
Polygala cruciata
Polygala incarnata
Polygala lutea
Polygala sanguinea
Polygala senega
Polygala verticillata
Polygala viridescens
Polygonum arifolium
Polygonum articulatum
Polygonum aviculare
Polygonum convolvulus
Polygonum erectum
Polygonum maritimum
Polygonum pensylvanicum
Polygonum persicaria
Polygonum sagittatum
Polygonum scandens
Polygonum virginianum
Polypodium bulbiferum
Polypodium lonchitis
Polypodium marginale
Polypodium noveboracense
Polypodium phegopteris
Polygonum virginianum
Polypremum procumbens
Populus balsamifera
Populus heterophylla
Populus nigra
Polymnia canadensis
Pontederia cordata
Portulaca oleracea
Potamogeton nutans

Potentilla canadensis
Potentilla norvegica
Potentilla reptans
Prenanthes alba
Prenanthes altissima
Prinos glaber
Prinos verticillatus
Proserpinaca palustris
Prunus lusitanica
Prunus virginiana
Ptelea trifoliata
Pteris atropurpurea
Pulmonaria virginica
Pyrola maculata
Pyrola rotundifolia
Pyrola umbellata
Pyrus coronaria

Quercus alba
Quercus nigra
Quercus phellos
Quercus prinus
Quercus rubra
Queria canadensis

Ranunculus abortivus
Ranunculus repens
Renealmia usneoides
Rhexia mariana
Rhexia virginica
Rhinanthus virginica
Rhododendron maximum
Rhus copallinum
Rhus glabra
Rhus radicans
Rhus toxicodendron
Rhus vernix
Ribes cynosbati
Ribes nigrum
Ribes oxyacanthoides
Robinia pseudoacacia
Rosa carolina
Rubus caesius
Rubus canadensis
Rubus fruticosus
Rubus hispidus
Rubus odoratus
Rubus occidentalis
Rudbeckia hirta
Rudbeckia laciniata
Rudbeckia oppositifolia
Rudbeckia purpurea
Rudbeckia triloba
Ruellia biflora
Ruellia strepens
Rumex acetosella
Rumex britannica
Rumex persicarioides
Rumex sanguineus
Rumex verticillatus

Sagina virginica
Sagittaria sagittifolia
Salicornia virginia
Salsola kali
Salsola prostrata
Salvia lyrata
Salvia urticifolia
Sambucus canadensis
Samolus valerandii
Sanguinaria canadensis
Sanguisorba canadensis
Sanicula canadensis
Sanicula europaea
Sanicula marilandica
Saponaria officinalis
Sarothra gentianoides
Sarracenia flava
Sarracenia purpurea
Satureja origanoides
Satureja virginiana
Saururus cernuus
Saxifraga nivalis
Saxifraga pensylvanica
Scandix cerefolium
Scandix procumbens
Schwalbea americana
Schoenus glomeratus
Scirpus capitatus
Scirpus glomeratus
Scirpus retrofractus
Scirpus spadiceus
Scrophularia marilandica
Scrophularia nodosa
Scutellaria hyssopifolia
Scutellaria integrifolia
Scutellaria lateriflora
Senecio aureus
Senecio canadensis
Senecio hieracifolius
Serratula glauca
Serratula noveboracensis
Serratula praealta
Serratula scariosa
Serratula spicata
Serratula squarrosa
Sicyos angulata
Sida abutilon
Sida crispa
Sida rhombifolia
Sida spinosa
Sigesbeckia occidentalis
Silene antirrhina
Silene nocturna
Silene virginica
Silphium asteriscus
Silphium helianthoides
Silphium laciniatum
Silphium solidaginoides
Silphium trifoliatum
Sison canadense

Sisymbrium nasturtium-aquaticum
Sisyrinchium bermudiana
Sium rigidius
Sloanea emarginata
Smilax bona-nox
Smilax caduca
Smilax herbacea
Smilax lanceolata
Smilax laurifolia
Smilax pseudo-china
Smilax rotundifolia
Smilax sarsaparilla
Smilax tamnoides
Smyrnium aureum
Smyrnium integerrimum
Solanum carolinense
Solanum diphyllum
Solanum mammosum
Solanum nigrum
var. virginicum
Solanum nigrum
var. vulgare
Solanum tomentosum
Solanum verbascifolium
Solanum virginianum
Solidago altissima
Solidago caesia
Solidago canadensis
Solidago flexicaulis
Solidago lateriflora
Solidago latifolia
Solidago noveboracensis
Solidago rigida
Solidago sempervirens
Sonchus canadensis
Sonchus floridanus
Sophora tinctoria
Sparganium erectum
Spermacoce tenuior
Spiraea aruncus
Spiraea hypericifolia
Spiraea opulifolia
Spiraea tomentosa
Spiraea trifoliata
Staphylea trifolia
Statice armeria
Statice limonium
Stewartia malacodendron
Stipa avenacea
Swertia corniculata
Swertia difformis

Taxus baccata
Tetracera volubilis
Tetragonotheca helianthoides
Teucrium canadense
Teucrium chamaepitys
Teucrium virginicum
Thalictrum cornutii
Thalictrum dioicum
Thalictrum purpurascens
Thaspia trifoliata
Thesium umbellatum
Thuja occidentalis
Tiarella cordifolia
Tilia americana
Tradescantia virginiana
Tragopogon virginicum
Trichostema brachiatum
Trichostema dichotomum
Trifolium arvense
Trifolium biflorum
Trifolium comosum
Trifolium reflexum
Trifolium repens
Trillium cernuum
Trillium erectum
Trillium sessile
Triosteum angustifolium
Triosteum perfoliatum

Ulmus americana
Uniola paniculata
Uniola spicata
Urtica canadensis
Urtica capitata
Urtica cylindrica
Urtica divaricata
Urtica pumila
Utricularia gibba
Utricularia subulata
Uvularia perfoliata
Uvularia sessilifolia

Vaccinium album
Vaccinium corymbosum
Vaccinium frondosum
Vaccinium hispidulum
Vaccinium ligustrinum
Vaccinium mucronatum
Vaccinium stamineum
Valeriana cornucopiae
Valeriana locusta var. radiata
Veratrum luteum
Verbena hastata
Verbena nodiflora
Verbena spuria
Verbena urticifolia
Verbesina alba
Verbesina virginica
Veronica anagallis-aquatica
Vernonica arvensis
Veronica beccabunga
Veronica marilandica
Veronica serpyllifolia
Veronica virginica
Viburnum acerifolium
Viburnum dentatum
Viburnum lentago
Viburnum nudum

Viburnum prunifolium
Viola canadensis
Viola lanceolata
Viola palmata
Viola pedata
Viola primulifolia
Viscum purpureum
Viscum rubrum
Viscum terrestre
Vitex agnus-castus
Vitis arborea
Vitis labrusca
Vitis laciniosa
Vitis vinifera
Vitis vulpina

Xanthium strumarium
Xyris indica

Yucca filamentosa
Yucca gloriosa

Zannichellia palustris
Zanthoxylum clava-herculis
Zizania aquatica

Vascular Plants from Temperate North America Mentioned in Linnaeus' First Edition of Species Plantarum as Occurring only in Temperate North America

America
Actaea spicata var. alba
Aletris farinosa
Alyssum hyperboreum
Andropogon alopecuroides
Andropogon virginicum
Annona muricata
Arabis canadensis
Arethusa divaricata
Aristolochia arborescens
Arum dracontium
Asclepias amoena
Asclepias tuberosa
Asclepias variagata
Aster dumosus
Aster ericoides
Aster grandiflorus
Aster laevis
Aster linariifolius
Aster linifolius
Aster miser
Aster mutabilis
Aster puniceus
Aster tenuifolius
Aster undulatus
Bidens bullata
Bidens frondosa
Bidens pilosa
Bignonia capreolata
Bignonia radicans
Buphthalmum helianthoides
Cacalia porophyllum
Cactus pentagonus
Campanula americana
Celosia paniculata
Cephalanthus occidentalis
Chionanthus virginica
Chrysanthemum serotinum
Circaea lutetiana
var. canadensis
Clitoria mariana
Coix dactyloides
Commelina communis
Convolvulus repens
Conyza asteroides
Cynanchum hirtum
Cyperus odoratus
Diospyros virginiana
Dracocephalum virginianum
Eriocaulon decangulare
Eupatorium purpureum
Euphorbia maculata
Fagus pumila
Galium tinctorium
Gomphrena interrupta
Gomphrena serrata
Hedysarum volubile
Helenium autumnale
Helianthus divaricatus
Hydrocotyle americana
Hydrocotyle umbellata
Jussiaea erecta
Limodorum tuberosum
Liriodendron tulipifera
Mentzelia aspera
Mitella diphylla
Myrica asplenifolia
Nyssa aquatica
Osmunda virginiana
Panicum filiforme
Panicum latifolium
Phlox paniculata
Phryma leptostachya
Physalis pruinosa
Platanus occidentalis
Podophyllum peltatum
Polygonum [illegible]dens
Populus balsamifera
Pyrola maculata
Quercus nigra
Quercus phellos
Quercus prinus
Rhus copallinum
Rhus glabra
Sanguinaria canadensis
Sarracenia flava
Sarracenia purpurea
Schwalbea americana

Senecio hieracifolius
Serratula spicata
Silphium laciniatum
Sison canadense
Smyrnium aureum
Solanum diphyllum
Solanum tomentosum
Solanum verbascifolium
Solanum virginianum
Solidago altissima
Solidago caesia
Solidago lateriflora
Solidago noveboracensis
Trichostema brachiatum
Trifolium comosum
Triosteum perfoliatum
Uniola spicata
Vaccinium corymbosum
Vaccinium frondosum
Vaccinium mucronatum
Vaccinium stamineum
Vitis labrusca

Canada
Actaea racemosa
Adiantum pedatum
Ageratum altissimum
Allium canadense
Ambrosia elatior
Ambrosia trifida
Anemone quinquefolia
Anemone thalictroides
Angelica atropurpurea
Angelica lucida
Antirrhinum canadense
Apocynum androsaemifolium
Apocynum cannabinum
Aquilegia canadensis
Arabis lyrata
Aralia racemosa
Arethusa bulbosa
Arethusa ophioglossoides
Asarum canadense
Asclepias incarnata
Aster annuus
Astragalus canadensis
Betula lenta
Betula nigra
Bromus ciliatus
Bromus purgans
Buchnera americana
Cacalia atriplicifolia
Carex folliculata
Carex squarrosa
Celastrus scandens
Chelone glabra
Chironia campanulata
Chrysocoma graminifolia
Cicuta bulbifera
Cinna arundinacea
Cistus canadensis
Collinsonia canadensis
Convallaria racemosa
Convallaria stellata
Conyza bifrons
var. flosculosa
Conyza linifolia
Coreopsis alternifolia
Cornus canadensis
Cracca virginiana
Crataegus coccinea
Cucubalus stellata
Cupressus thyoides
Dalibarda repens
Elymus canadensis
Epigaea repens
Erigeron philadelphicum
Eupatorium rotundifolium
Euphorbia corollata
Euphorbia ipecacuanhae
Euphorbia polygonifolia
Fumaria cucullaria
Fumaria sempervirens
Galium trifidum
Gaultheria procumbens
Gerardia flava
Gerardia pedicularia
Gerardia purpurea
Guilandina dioica
Hedera quinquefolia
Hedysarum canadense
Helianthus decapetalus
Helianthus giganteus
Helianthus strumosus
Hibiscus moscheutos
Hibiscus palustris
Hieracium paniculatum
Hippophae canadensis
Holcus laxus
Hordeum jubatum
Hypericum canadense
Hypericum mutilum
Hyssopus nepetoides
Lactuca canadensis
Lechea major
Lechea minor
Lilium canadense
Liquidambar peregrina
Lobelia cliffortiana
Lobelia inflata
Lobelia kalmii
Lycopodium alopecuroides
Lysimachia ciliata
Melissa pulegioides
Menispermum canadense
Mentha canadensis
Mespilus canadensis
Mimulus ringens
Monarda fistulosa
Monotropa uniflora

Ophrys cernua
Orchis ciliaris
Orchis psycodes
Ornithogalum hirsutum
Orontium aquaticum
Othonna cineraria
Oxalis violacea
Panax quinquefolius
Pinus balsamea
Pinus strobus
Pinus taeda
Poa capillaris
Polygala incarnata
Polygonum articulatum
Polypodium bulbiferum
Polypodium marginale
Polypodium noveboracense
Polymnia canadensis
Potentilla canadensis
Prenanthes altissima
Prinos glaber
Queria canadensis
Ranunculus abortivus
Rhus radicans
Rhus toxicodendron
Ribes cynosbati
Ribes oxyacanthoides
Rubus canadensis
Rubus hispidus
Rubus odoratus
Rubus occidentalis
Rudbeckia hirta
Rudbeckia laciniata
Sanguisorba canadensis
Saxifraga pensylvanica
Scutellaria integrifolia
Scutellaria lateriflora
Senecio aureus
Senecio canadensis
Smilax caduca
Smilax rotundifolia
Solidago canadensis
Solidago flexicaulis
Solidago latifolia
Solidago sempervirens
Sonchus canadensis
Sonchus floridanus
Spiraea trifoliata
Teucrium canadense
Thalictrum cornutii
Thalictrum dioicum
Thalictrum purpurascens
Tilia americana
Tragopogon virginicum
Trifolium biflorum
Urtica capitata
Urtica divaricata
Urtica pumila
Uvularia perfoliata
Uvularia sessilifolia
Veratrum luteum
Verbena hastata
Verbena spuria
Verbena urticifolia
Viburnum lentago
Viburnum prunifolium
Viola canadensis

Carolina
Amorpha fruticosa
Andromeda arborea
Annona glabra
Annona triloba
Asarum virginicum
Asclepias purpurascens
Astragalus carolinianus
Bidens nivea
Bignonia caerulea
Callicarpa americana
Canna glauca
Carduus altissimus
Ceanothus americanus
Cissampelos smilacina
Clematis crispa
Clematis viorna
Clethra alnifolia
Convolvulus carolinus
Coreopsis lanceolata
Crotalaria alba
Crotalaria perfoliata
Cupressus distichia
Erythrina herbacea
Eupatorium coelestinum
Fraxinus americana
Geranium carolinianum
Glycine frutescens
Gnaphalium purpureum
Hedysarum marilandicum
Horminum virginicum
Ilex cassine
Ipomoea carolina
Ipomoea lacunosa
Ipomoea tamnifolia
Juniperus virginiana
Laurus borbonia
Laurus sassafras
Lonicera marilandica
Lonicera symphoricarpos
Lycopodium apodum
Lycopodium carolinanum
Magnolia virginiana
    var. acuminata
    var. foetida
    var. glauca
    var. grisea
    var. tripetala
Malva caroliniana
Menispermum carolinum
Menispermum virginicum
Mitchella repens

Myrica cerifera
Phaseolus helvulus
Philadelphus inodorus
Polemonium rubrum
Polypremum procumbens
Prenanthes alba
Quercus rubra
Rosa carolina
Rudbeckia purpurea
Ruellia biflora
Ruellia strepens
Serratula glauca
Serratula praealta
Silene antirrhina
Silphium asteriscus
Sloanea emarginata
Smilax bona-nox
Smilax laurifolia
Smilax tamnoides
Solanum carolinense
Spermacoce tenuior
Spiraea hypericifolia
Spiraea opulifolia
Trillium cernuum
Trillium sessile
Uniola paniculata
Viscum purpureum
Viscum rubrum
Vitis arborea

Florida
Actaea racemosa
Dioscorea villosa
Laurus sassafras
Polygonum arifolium

Maryland
Acrostichum areolatum
Asarum virginicum
Cassia marilandica
Iris versicolor
Juglans nigra
Kalmia latifolia
Lonicera marilandica
Mitchella repens
Monotropa uniflora
Osmunda cinnamomea
Polygala senega
Polygonum sagittatum
Rhexia mariana
Sanicula marilandica
Saururus cernuus
Serratula glauca
Smilax herbacea
Valeriana locusta
var. radiata

Mississippi
Erythrina herbacea
Silphium laciniatum

New England
Aster novae-angliae

New Jersey
Kalmia angustifolia

New York
Bartsia coccinea
Holosteum succulentum
Kalmia angustifolia
Monarda didyma
Solidago sempervirens

Pennsylvania
Acer pensylvanicum
Acer rubrum
Acer saccharinum
Amaranthus retroflexus
Ambrosia artemisiifolia
Andromeda racemosa
Aster novi-belgii
Avena pensylvanica
Clethra alnifolia
Datisca hirta
Eupatorium altissimum
Euphorbia portulacoides
Gaura biennis
Gentiana quinquefolia
Gnaphalium obtusifolium
Gnaphalium purpureum
Helonias bullata
Hieracium gronovii
Hieracium kalmii
Iris versicolor
Kalmia angustifolia
Kalmia latifolia
Linum virginianum
Lycopodium apodum
Lycopodium obscurum
Monarda didyma
Myrica cerifera
Panax quinquefolius
Polygala senega
Polygonum erectum
Polygonum pensylvanicum
Prenanthes alba
Sarothra gentianoides
Saxifraga pensylvanica
Serratula praealta
Smilax tamnoides
Solidago rigida
Spiraea tomentosa
Thesium umbellatum
Trichostema dichotomum
Vaccinium album
Vaccinium ligustrinum
Viscum terrestre

Virginia
Acer negundo

Acer rubrum
Acnida cannabina
Acrostichum areolatum
Acrostichum platyneuros
Actaea racemosa
Adiantum pedatum
Agave virginica
Ageratum altissimum
Agrostis virginica
Alisma cordifolia
Alisma subulata
Amaranthus graecizans
Amaranthus hybridus
Amaranthus hypocondriacus
Amaranthus lividus
Amaryllis atamasca
Ambrosia artemisiifolia
Ambrosia elatior
Ambrosia trifida
Ammannia ramosior
Anchusa virginiana
Andromeda arborea
Andromeda mariana
Andromeda paniculata
Andropogon divaricatum
Anemone quinquefolia
Anemone thalictroides
Anemone virginiana
Antirrhinum canadense
Apocynum androsaemifolium
Apocynum cannabinum
Aquilegia canadensis
Aralia spinosa
Arethusa bulbosa
Arethusa ophioglossoides
Aristolochia serpentaria
Arum virginicum
Asarum virginicum
Asclepias decumbens
Ascelpias incarnata
Asclepias rubra
Asclepias syriaca
Asclepias verticillata
Ascyrum crux-andreae
Ascyrum hypericoides
Ascyrum villosum
Aster concolor
Aster divaricatus
Aster novi-belgii
Aster rigidus
Aster tradescantii
Aster vernus
Astragalus canadensis
Azalea lutea
Azalea viscosa
Baccharis foetida
Baccharis halimifolia
Bartsia coccinea
Betula lenta
Betula nigra
Bidens bipinnata
Bignonia sempervirens
Buchnera americana
Burmannia biflora
Cacalia atriplicifolia
Cacalia suaveolens
Callicarpa americana
Campanula perfoliata
Cardamine virginica
Carduus virginianus
Cassia marilandica
Cassia nictitans
Ceanothus americanus
Celastrus bullatus
Celtis occidentalis
Cenchrus tribuloides
Cercis canadensis
Chaerophyllum arborescens
Chelone glabra
Chelone hirsuta
Chelone penstemon
Chenopodium virginicum
Chironia angularis
Chironia dodecandra
Chrysogonum virginianum
Cicuta bulbifera
Cicuta maculata
Claytonia virginica
Clematis viorna
Clethra alnifolia
Clitoria virginiana
Collinsonia canadensis
Commelina erecta
Convallaria racemosa
Convolvulus panduratus
Convolvulus spithamaeus
Coreopsis alternifolia
Coreopsis angustifolia
Coreopsis auriculata
Coreopsis tripteris
Coreopsis verticillata
Cornus florida
Cracca virginiana
Crataegus coccinea
Crataegus tomentosa
Crataegus viridis
Cucubalus stellatus
Cupressus distichia
Cuscuta americana
Cynoglossum virginianum
Cyperus arundinacea
Dianthera americana
Diodia virginiana
Dioscorea villosa
Dirca palustris
Dodecatheon meadia
Dolichos polystachyus
Dolichos regularis
Dracontium foetidum
Elephantopus tomentosus

Elymus virginicus
Epigaea repens
Erigeron camphoratum
Eriophorum virginicum
Eryngium aquaticum
Eupatorium aromaticum
Eupatorium coelestinum
Eupatorium hyssopifolium
Eupatorium perfoliatum
Eupatorium rotundifolium
Eupatorium scandens
Eupatorium sessilifolium
Eupatorium trifoliatum
Euphorbia corollata
Euphorbia ipecacuanhae
Euphorbia polygonifolia
Euonymus americanus
Ferula canadensis
Fraxinus americana
Fumaria cucullaria
Fumaria sempervirens
Galax aphylla
Galium bermudense
Gaura biennis
Gentiana saponaria
Gentiana villosa
Geranium carolinianum
Gerardia flava
Gerardia pedicularia
Gerardia purpurea
Geum virginianum
Gleditsia triacanthos
Glycine apios
Glycine bracteata
Glycine comosa
Glycine tomentosa
Gnaphalium obtusifolium
Gnaphalium plantaginifolium
Gnaphalium purpureum
Gratiola dubia
Gratiola virginiana
Hamamelis virginiana
Hedysarum canadense
Hedysarum frutescens
Hedysarum hirtum
Hedysarum marilandicum
Hedysarum nudiflorum
Hedysarum paniculatum
Hedysarum repens
Hedysarum violaceum
Hedysarum virginicum
Hedysarum viridiflorum
Helianthus angustifolius
Helianthus atrorubens
Helianthus giganteus
Helianthus laevis
Helianthus multiflorus
Heuchera americana
Hibiscus moscheutos
Hibiscus palustris
Hibiscus virginicus
Hieracium gronovii
Hieracium venosum
Holcus laxus
Holcus striatus
Horminum virginicum
Houstonia caerulea
Houstonia purpurea
Hydrangea arborescens
Hydrophyllum virginianum
Hyoseris virginica
Hypericum kalmianum
Hypericum mutilum
Hypericum setosum
Hyssopus nepetoides
Ipomoea nyctelea
Iris verna
Iris versicolor
Iris virginica
Itea virginica
Juglans alba
Juglans nigra
Juniperus virginiana
Jussiaea erecta
Kalmia latifolia
Laurus aestivalis
Laurus benzoin
Laurus borbonia
Laurus indica
Laurus sassafras
Leontice thalictroides
Leontodon dandelion
Linum virginianum
Lithospermum virginianum
Lobelia cardinalis
Lobelia cliffortiana
Lobelia inflata
Lobelia siphilitica
Lonicera marilandica
Lonicera symphoricarpos
Ludwigia alternifolia
Lupinus perennis
Lycopodium alopecuroides
Lycopodium apodum
Lycopsis virginica
Lycopus virginicus
Lysimachia ciliata
Lysimachia quadrifolia
Lythrum lineare
Lythrum petiolatum
Lythrum verticillatum
Magnolia virginiana
    var. acuminata
    var. foetida
    var. glauca
    var. grisea
    var. tripetala
Medeola virginiana
Medicago virginca
Melanthium virginicum

Melissa pulegioides
Menispermum canadense
Menispermum virginicum
Mespilus arbutifolia
Mespilus canadensis
Mimulus ringens
Mitchella repens
Monarda ciliata
Monarda clinopodia
Monarda punctata
Monotropa uniflora
Morus rubra
Myosotis virginiana
Myrica cerifera
Napaea dioica
Napaea hermaphrodita
Napaea virginica
Obalaria virginica
Oenothera fruticosa
Oldenlandia uniflora
Onoclea sensibilis
Ophrys cernua
Orchis ciliaris
Orchis flava
Orchis spectabilis
Ornithogalum bivale
Ornithogalum hirsutum
Orobanche uniflora
Orobanche virginiana
Orontium aquaticum
Osmunda claytoniana
Osteospermum uvedalia
Oxalis longiflora
Oxalis stricta
Oxalis violacea
Panax quinquefolius
Panax trifolius
Panicum dichotomum
Panicum virgatum
Parthenium integrifolium
Penthorum sedoides
Phalaris oryzoides
Phlox divaricata
Phlox glaberrima
Phlox maculata
Phlox ovata
Phlox pilosa
Phlox setacea
Phlox subulata
Pinus balsamea
Pinus strobus
Pinus taeda
Plantago virginica
Poa capillaris
Poa flava
Podophyllum diphyllum
Polemonium dubium
Polygala cruciata
Polygala incarnata
Polygala lutea
Polygala sanguinea
Polygala senega
Polygala verticillata
Polygala viridescens
Polygonum arifolium
Polygonum sagittatum
Polygonum virginianum
Polypodium virginianum
Polypremum procumbens
Populus heterophylla
Pontederia cordata
Prenanthes alba
Prenanthes altissima
Prinos verticillatus
Proserpinaca palustris
Prunus virginiana
Ptelea trifoliata
Pteris atropurpurea
Pulmonaria virginica
Pyrus coronaria
Quercus alba
Quercus rubra
Queria canadensis
Ranunculus abortivus
Rhexia virginica
Rhinanthus virginica
Rhododendron maximum
Rhus radicans
Rhus toxicodendron
Robinia pseudoacacia
Rudbeckia hirta
Rudbeckia laciniata
Rudbeckia oppositifolia
Rudbeckia purpurea
Rudbeckia triloba
Ruellia strepens
Rumex britannica
Rumex persicarioides
Rumex sanguineus
Rumex verticillatus
Sagina virginica
Salvia lyrata
Salvia urticifolia
Sambucus canadensis
Sanicula canadensis
Sanicula marilandica
Sarothra gentianoides
Satureja origanoides
Satureja virginiana
Saururus cernuus
Saxifraga pensylvanica
Scandix procumbens
Schoenus glomeratus
Scirpus capitatus
Scirpus retrofractus
Scrophularia marilandica
Scutellaria hyssopifolia
Scutellaria integrifolia
Scutellaria lateriflora
Senecio aureus

Serratula glauca
Serratula praealta
Serratula scariosa
Serratula squarrosa
Sigesbeckia occidentalis
Silene antirrhina
Silene virginica
Silphium asteriscus
Silphium helianthoides
Silphium solidaginoides
Silphium trifoliatum
Sium rigidius
Smilax herbacea
Smilax lanceolata
Smilax laurifolia
Smilax tamnoides
Smyrnium integerrimum
Solidago canadensis
Sonchus floridanus
Spiraea opulifolia
Spiraea trifoliata
Staphylea trifolia
Stewartia malacodendron
Stipa avenacea
Swertia difformis
Tetragonotheca helianthoides
Teucrium virginicum
Thaspia trifoliata
Thesium umbellatum
Tilia americana
Tradescantia virginiana
Tragopogon virginicum
Trichostema dichotomum
Trifolium biflorum
Trifolium reflexum
Trillium erectum
Trillium sessile
Triosteum angustifolum
Ulmus americana
Urtica divaricata
Utricularia gibba
Utricularia subulata
Uvularia perfoliata
Vaccinium hispidulum
Veratrum luteum
Verbena nodiflora
Verbena spuria
Verbena urticifolia
Verbesina virginica
Veronica marilandica
Veronica virginica
Viburnum acerifolium
Viburnum dentatum
Viburnum nudum
Viburnum prunifolium
Viola palmata
Viola pedata
Vitis arborea
Vitis vulpina
Yucca filamentosa

Vascular Plants from Temperate North America Mentioned in Linnaeus' First Edition of Species Plantarum as Occurring only in the New World

Acrostichum polypodioides
Aesculus pavia
Andropogon nutans
Annona muricata
Arum triphyllum
Asclepias nivea
Baccharis ivaefolia
Bignonia crucigera
Buphthalmum frutescens
Caesalpinia brasiliensis
Cassia chamaecrista
Cassia ligustrina
Celastrus myrtifolius
Chenopodium anthelminticum
Crescentia cujete
Crotalaria sagittalis
Cynanchum suberosum
Cyperus strigosus
Eryngium foetidum
Hedysarum canescens
Hypericum lasianthus
Iva frutescens
Laurus winterana
Lepidium virginicum
Liquidambar styraciflua
Lonicera sempervirens
Melothria pendula
Pancratium carolinianum
Panicum capillare
Panicum clandestinum
Passiflora incarnata
Passiflora lutea
Physalis viscosa
Phytolacca americana
Pistacia simaruba
Renealmia usneoides
Sicyos angulata
Sida crispa
Sisyrinchium bermudiana
Smilax pseudo-china
Smilax sarsaparilla
Solanum mammosum
Sophora tinctoria
Tetracera volubilis
Urtica cylindrica
Verbesina alba
Yucca gloriosa

Vascular Plants from Temperate North America Mentioned in Linnaeus' First Edition of Species Plantarum as Occurring in Temperate North America and Elsewhere in the World

Acalypha virginica
Andromeda calyculata
Anemone dichotoma
Aralia nudicaulis
Arbutus uva-ursi
Arnica maritima
Asplenium rhizophyllum
Aster cordifolius
Atriplex laciniata
Bunias cakile
Cactus opuntia
Carpinus betulus
Carpinus ostrya
Cassine peragua
Chelidonium glaucium
Chrysanthemum arcticum
Chrysoplenium oppositifolium
Clematis vitalba
Clinopodium rugosum
Clinopodium vulgare
Convolvulus hederaceus
Cornus sanguinea
Cynosurus aegyptius
Cypripedium calceolus
Dactylis cynosuroides
Datura stramonium
Dianthus plumarius
Drosera rotundifolia
Erigeron canadense
Erythronium dens-canis
Gentiana ciliata
Geranium maculatum
Gnaphalium margaritaceum
Helleborus trifolius
Hypericum ascyron
Ilex aquifolium
Impatiens noli-tangere
Isnardia palustris
Juncus bulbosus
Lilium camschatcense
Linnaea borealis
Lycopodium complanatum
Lycopodium rupestre
Melica altissima
Mollugo verticillata
Monotropa hypopithys
Nicotiana rustica
Nymphaea alba
Nymphaea lotus
Oenothera biennis
Ophrys lilifolia
Origanum vulgare
Panicum crusgalli
Panicum sanguinale
Poa compressa
Polemonium caeruleum
Polygonum maritimum
Polypodium lonchitis
Polypodium phegopteris
Portulaca oleracea
Potentilla norvegica
Prunus lusitanica
Pyrola rotundifolia
Pyrola umbellata
Rhus vernix
Ribes nigrum
Sagittaria sagittifolia
Salicornia virginica
Samolus valerandii
Saxifraga nivalis
Scirpus glomeratus
Serratula noveboracensis
Silene nocturna
Sisymbrium nasturtium-aquaticum
Statice armeria
Statice limonium
Swertia corniculata
Taxus baccata
Thuja occidentalis
Tiarella cordifolia
Trifolium arvense
Urtica canadensis
Valeriana cornucopiae
Veronica serphllifolium
Viola primulifolia
Xanthium strumarium

Vascular Plants from Temperate North America Mentioned in Linnaeus' First Edition of Species Plantarum as Occurring Elsewhere but not Temperate North America

Agrimonia eupatoria
Alsine media
Amaranthus spinosus
Andropogon hirtum
Anemone hepatica
Angelica sylvestris
Anthericum calyculatum
Antirrhinum elatine
Aphanes arvensis
Arenaria rubra var. marina
Arundo phragmites
Atriplex halimus
Betonica annua
Bignonia catalpa
Briza eragrostis
Callitriche palustris
Caltha palustris
Carex pseudocyperus
Cerastium semidecandrum
Chenopodium album
Clinopodium incanum
Coix lacryma-jobi
Convallaria polygonatum
Daucus carota
Dipsacus fullonum
Draba verna
Elatine hydropiper

Elephantopus scaber
Epilobium hirsutum
Equisetum arvense
Equisetum hyemale
Heliotropium indicum
Juncus campestris
Juncus effusus
Juncus filiformis
Lamium amplexicaule
Ligusticum scothieum
Lysimachia punctata
Melissa nepeta
Mentha spicata var. viridis
Nymphaea lutea
Nymphaea nelumbo
Oenothera mollissima
Ophiorrhiza mitreola
Osmunda regalis
Panicum dissectum
Panicum glaucum
Panicum italicum
Physalis pubescens
Polygonum aviculare
Polygonum convolvulus
Polygonum persicaria
Populus nigra
Potamogeton nutans
Potentilla reptans
Ranunculus repens
Rubus caesius
Rubus fruticosus
Rumex acetosella
Salsola kali
Salsola prostrata
Sanicula europaea
Saponaria officinalis
Scandix cerefolium
Scirpus spadiceus
Scrophularia nodosa
Sida abutilon
Sida rhombifolia
Sida spinosa
Solanum nigrum var. vulgare
Sparganium erectum
Spiraea aruncus
Teucrium chamaepitys
Trifolium repens
Veronica anagallis-aquatica
Veronica arvensis
Veronica beccabunga
Vitex agnus-castus
Vitis vinifera
Xyris indica

Vascular Plants Named for Certain Geographical Areas in Temperate North America by Linnaeus in the First Edition of Species Plantarum

America

Buchnera americana
Callicarpa americana
Campanula americana
Ceanothus americanus
Cuscuta americana
Dianthera americana
Euonymus americanus
Fraxinus americana
Heuchera americana
Hydrocotyle americana
Phytolacca americana
Schwalbea americana
Tilia americana
Ulmus americana

Canada

Allium canadense
Antirrhinum canadense
Aquilegia canadensis
Arabis canadensis
Asarum canadense
Astragalus canadensis
Cercis canadensis
Circaea lutetiana
var. canadensis
Cistus canadensis
Collinsonia canadensis
Cornus canadensis
Elymus canadensis
Erigeron canadense
Ferula canadensis
Hippophae canadensis
Hypericum canadense
Lactuca canadensis
Lilium canadense
Menispermum canadense
Mentha canadensis
Mespilus canadensis
Ornithogalum canadense
Polymnia canadensis
Potentilla canadensis
Queria canadensis
Rubus canadensis
Sambucus canadensis
Sanguinaria canadensis
Sanguisorba canadensis
Sanicula canadensis
Senecio canadensis
Sison canadense
Solidago canadensis
Sonchus canadensis
Teucrium canadense
Urtica canadensis
Viola canadensis

Carolina

Astragalus carolinianus
Convolvulus carolinus
Geranium carolinanum
Ipomoea carolina

Lycopodium carolinianum
Malva caroliniana
Mensipermum carolinum
Pancratium carolinianum
Rosa carolina
Solanum carolinense

Florida
Sonchus floridanus

Maryland
Andromeda mariana
Cassia marilandica
Clitoria mariana
Hedysarum marilandicum
Lonicera marilandica
Rhexia mariana
Sanicula marilandica
Scrophularia marilandica
Veronica marilandica

New England
Aster novae-angliae

New York
Aster novi-belgii
Polypodium noveboracense
Serratula noveboracensis
Solidago noveboracensis

Pennsylvania
Acer pensylvanicum
Avena pensylvanica
Erigeron philadelphicum
Polygonum pensylvanicum
Saxifraga pensylvanica

Virginia
Acalypha virginica
Agave virginica
Agrostis virginica
Anchusa virginiana
Andropogon virginicum
Anemone virginiana
Arum virginicum
Asarum virginicum
Cardamine virginica
Carduus virginianus
Chenopodium virginicum
Chionanthus virginica
Chrysogonum virginianum
Claytonia virginica
Clitoria virginiana
Cracca virginiana
Cynoglossum virginianum
Diodia virginiana
Diospyros virginiana
Dracocephalum virginianum
Elymus virginicus
Eriophorum virginicum
Geum virginianum
Gratiola virginiana
Hamamelis virginiana
Hedysarum virginicum
Hibiscus virginicus
Hydrophyllum virginianum
Hyoseris virginica
Iris virginica
Itea virginica
Juniperus virginiana
Lepidium virginicum
Linum virginianum
Lithospermum virginianum
Lycopsis virginica
Lycopus virginicus
Magnolia virginiana
Medeola virginiana
Medicago virginica
Melanthium virginicum
Menispermum virginicum
Myosotis virginiana
Nepeta virginica
Obolaria virginica
Orobanche virginiana
Osmunda virginiana
Plantago virginica
Polygonum virginianum
Polypodium virginianum
Prunus virginiana
Pulmonaria virginica
Rhexia virginica
Rhinanthus virginica
Sagina virginica
Salicornia virginica
Satureja virginiana
Silene virginica
Solanum virginianum
Teucrium virginicum
Tradescantia virginiana
Tragopogon virginicum
Verbesina virginica

Collection Numbers and Species of Vascular Plants Gathered by John Clayton and Indirectly Reported in Linnaeus' First Edition of Species Plantarum

201 Acalypha virginica
530 Acer negundo
000 Acer rubrum
599 Acnida cannabina
011 Acrostichum areolatum
014 Acrostichum platyneuros
685 Acrostichum polypodioides
305 Actaea racemosa
320 Adiantum pedatum
321 Adiantum pedatum
498 Agave virginica
199 Ageratum altissimum

000 Agrimonia eupatoria
000 Agrostis virginica
507 Agrostis virginica
074 Aletris farinosa
723 Alisma subulata
529 Alsine media
442 Amaranthus graecizans
000 Amaranthus lividus
569 Amaranthus spinosus
256 Amaryllis atamasca
512 Ambrosia elatior
724 Ambrosia trifida
774 Ammannia ramosior
304 Anchusa virginiana
000 Andromeda arborea
000 Andromeda calyculata
030 Andromeda mariana
073 Andromeda paniculata
601 Andropogon alopecuroides
070 Andropogon divaricatum
600 Andropogon divaricatum
602 Andropogon hirtum
621 Andropogon nutans
460 Andropogon virginicum
606 Andropogon virginicum
328 Anemone hepatica
294 Anemone thalictroides
529 Anemone virginiana
125 Angelica sylvestris
058 Annona muricata
269 Anthericum calyculatum
256 Antirrhinum canadense
435 Antirrhinum elatine
374 Aphanes arvensis
438 Apocynum cannabinum
338 Aquilegia canadensis
400 Arabis canadensis
745 Arabis canadensis
056 Arabis lyrata
394 Arabis lyrata
042 Aralia nudicaulis
233 Aralia spinosa
475 Arenaria rubra
var. marina
000 Arethusa bulbosa
472 Arethusa bulbosa
635 Arethusa divaricata
077 Arethusa ophioglossoides
000 Aristolochia serpentaria
066 Arum triphyllum
228 Arum virginicum
581 Arundo phragmites
288 Asarum canadense
704 Asarum virginicum
083 Asclepias decumbens
222 Asclepias incarnata
065 Asclepias nivea
263 Asclepias rubra
000 Asclepias syriaca
216 Asclepias verticillata
230 Ascyrum hypericoides
607 Aster concolor
143 Aster divaricatus
767 Aster divaricatus
072 Aster dumosus
194 Aster ericoides
239 Aster grandiflorus
072 Aster linifolius
244 Aster novae-angliae
009 Aster rigidus
391 Aster vernus
565 Astragalus canadensis
571 Atriplex halimus
000 Atriplex laciniata
052 Azalea lutea
032 Azalea viscosa
159 Baccharis foetida
240 Baccharis halimifolia
293 Bartsia coccinea
271 Betonica annua
000 Betula lenta
688 Betula nigra
100 Bignonia crucigera
225 Bignonia radicans
582 Briza eragrostis
142 Buchnera americana
732 Bunias cakile
242 Buphthalmum frutescens
208 Buphthalmum helianthoides
248 Burmannia biflora
133 Cacalia atriplicifolia
099 Cactus opuntia
000 Callicarpa americana
378 Callitriche palustris
522 Caltha palustris
020 Campanula perfoliata
462 Cardamine virginica
193 Carduus virginianus
259 Carex pseudocyperus
000 Carpinus ostrya
156 Cassia chamaecrista
146 Cassia ligustrina
069 Ceanothus americanus
311 Ceanothus americanus
000 Celastrus scandens
576 Celosia paniculata
624 Celtis occidentalis
206 Cenchrus tribuloides
106 Cephalanthus occidentalis
342 Cerastium semidecandrum
000 Cercis canadensis
276 Chelidonium glaucium
010 Chelone glabra
039 Chelone hirsuta
000 Chenopodium album
046 Chionanthus virginica
120 Chironia dodecandra
298 Chrysogonum virginianum
215 Cicuta bulbifera
013 Cicuta maculata

123 Cicuta maculata
251 Claytonia virginica
411 Clematis viorna
270 Clematis vitalba
112 Clitoria virginiana
067 Coix lacryma-jobi
093 Commelina communis
093 Commelina erecta
335 Convallaria polygonatum
035 Convallaria racemosa
504 Convolvulus hederaceus
641 Convolvulus panduratus
665 Convolvulus repens
553 Convolvulus spithamaeus
667 Coreopsis angustifolia
298 Coreopsis auriculata
308 Coreopsis verticillata
057 Cornus florida
102 Cracca virginiana
043 Crataegus coccinea
000 Crataegus crus-galli
055 Crataegus tomentosa
526 Crataegus viridis
126 Crotalaria sagittalis
245 Cucubalus stellatus
384 Cupressus distichia
215 Cuscuta americana
001 Cynanchum suberosum
223 Cynanchum suberosum
257 Cynoglossum virginianum
562 Cyperus arundinacea
509 Cyperus odoratus
040 Cypripedium calceolus
577 Dactylis cynosuroides
583 Dactylis cynosuroides
000 Datura stramonium
444 Daucus carota
408 Dianthera americana
277 Diodia virginiana
094 Dioscorea villosa
080 Diospyros virginiana
632 Diospyros virginiana
267 Dipsacus fullonum
000 Dirca palustris
568 Dolichos polystachyus
121 Dolichos regularis
525 Draba verna
017 Dracontium foetidum
003 Drosera rotundifolia
646 Elatine hydropiper
655 Elephantopus scaber
148 Elephantopus tomentosus
446 Elymus virginicus
250 Epigaea repens
586 Epilobium hirsutum
341 Equisetum arvense
657 Equisetum hyemale
165 Erigeron camphoratum
449 Erigeron canadense
234 Eriocaulon decangulare
439 Eriocaulon decangulare
461 Eriophorum virginicum
500 Eryngium aquaticum
282 Eryngium foetidum
691 Erythronium dens-canis
603 Eupatorium aromaticum
179 Eupatorium coelestinum
000 Eupatorium perfoliatum
162 Eupatorium purpureum
147 Eupatorium scandens
620 Eupatorium trifoliatum
155 Euphorbia corollata
000 Euphorbia ipecacuanhae
152 Euphorbia polygonifolia
075 Euonymus americanus
000 Fagus pumila
548 Ferula canadensis
000 Fraxinus americana
625 Fumaria cucullaria
004 Galax aphylla
313 Galium bermudense
010 Gentiana saponaria
605 Gentiana villosa
372 Geranium carolinianum
307 Geranium maculatum
009 Gerardia flava
192 Gerardia pedicularia
000 Gerardia purpurea
199 Geum virginianum
000 Gleditsia triacanthos
127 Glycine apios
592 Glycine bracteata
182 Glycine comosa
113 Glycine tomentosa
203 Gnaphalium obtusifolium
287 Gnaphalium plantaginifolia
385 Gnaphalium purpureum
164 Gratiola dubia
594 Gratiola dubia
379 Gratiola virginiana
544 Hamamelis virginiana
673 Hamamelis virginiana
116 Hedera quinquefolia
209 Hedysarum canescens
174 Hedysarum frutescens
510 Hedysarum hirtum
516 Hedysarum marilandicum
124 Hedysarum nudiflorum
184 Hedysarum paniculatum
085 Hedysarum repens
103 Hedysarum violaceum
564 Hedysarum virginicum
614 Hedysarum virginicum
190 Hedysarum viridiflorum
202 Helenium autumnale
013 Helianthus angustifolius
136 Helianthus atrorubens
109 Helianthus giganteus
195 Helianthus laevis
301 Heuchera americana

424 Heuchera americana
122 Hibiscus moscheutos
567 Hibiscus virginicus
447 Hieracium gronovii
386 Hieracium venosum
589 Holcus laxus
590 Holcus striatus
060 Houstonia caerulea
063 Houstonia purpurea
079 Hydrangea arborescens
429 Hydrocotyle umbellata
249 Hydrophyllum virginianum
376 Hyoseris virginica
552 Hypericum canadense
232 Hypericum mutilum
135 Hypericum setosum
168 Hyssopus nepetoides
000 Ilex aquifolium
253 Iris verna
259 Iris virginica
480 Itea virginica
556 Itea virginica
243 Iva frutescens
000 Juglans alba
000 Juglans nigra
340 Juncus bulbosus
332 Juncus campestris
393 Juncus effusus
580 Juncus filiformis
884 Juniperus virginiana
021 Kalmia angustifolia
331 Lamium amplexicaule
000 Laurus aestivalis
520 Laurus aestivalis
054 Laurus benzoin
000 Laurus borbonia
485 Laurus indica
056 Laurus sassafras
610 Lechea minor
545 Leontice thalictroides
019 Leontodon dandelion
383 Leontodon dandelion
000 Lepidium virginicum
307 Ligusticum scothieum
076 Limodorum tuberosum
440 Linum virginianum
000 Liquidambar styraciflua
487 Liquidambar styraciflua
531 Liquidambar styraciflua
016 Liriodendron tulipifera
647 Lithospermum virginianum
005 Lobelia cardinalis
196 Lobelia cliffortiana
000 Lonicera marilandica
201 Lonicera symphoricarpos
281 Lonicera symphoricarpos
137 Ludwigia alternifolia
000 Lupinus perennis
027 Lycopodium alopecuroides
000 Lycopsis virginica
185 Lycopus virginicus
433 Lysimachia punctata
419 Lysimachia quadrifolia
505 Lythrum lineare
418 Lythrum petiolatum
214 Lythrum verticillatum
034 Magnolia virginiana
404 Magnolia virginiana var. acuminata
024 Magnolia virginiana var. foetida
022 Medeola virginiana
191 Medicago virginica
422 Melanthium virginicum
198 Melissa nepeta
514 Melissa pulegioides
134 Melothria pendula
546 Menispermum canadense
425 Menispermum virginicum
654 Mentha spicata var. viridis
060 Mespilus canadensis
295 Mespilus canadensis
130 Mimulus ringens
028 Mitchella repens
399 Mollugo verticillata
412 Monarda ciliata
212 Monarda clinopodia
140 Monarda punctata
245 Monotropa uniflora
111 Myosotis virginiana
684 Myrica asplenifolia
719 Myrica asplenifolia
000 Myrica cerifera
437 Nepeta virginica
000 Nyssa aquatica
049 Nyssa aquatica
286 Obolaria virginica
000 Oenothera biennis
036 Oenothera fruticosa
333 Oenothera fruticosa
200 Oenothera mollissima
587 Oldenlandia uniflora
674 Onoclea sensibilis
714 Onoclea sensibilis
187 Ophiorrhiza mitreola
658 Ophrys lilifolia
708 Ophrys lilifolia
560 Orchis ciliaris
639 Orchis flava
668 Orchis psycodes
260 Orchis spectabilis
310 Origanum vulgare
044 Ornithogalum bivale
000 Ornithogalum hirsutum
387 Orobanche uniflora
604 Orobanche virginiana
053 Orontium aquaticum
000 Osmunda claytoniana
011 Osmunda regalis
008 Osmunda virginiana

138 Osteospermum uvedalia
221 Osteospermum uvedalia
741 Oxalis longiflora
474 Oxalis stricta
000 Oxalis violacea
000 Panax quinquefolius
329 Panax trifolius
454 Panicum capillare
458 Panicum dichotomum
579 Panicum glaucum
591 Panicum italicum
457 Panicum sanguinale
578 Panicum virgatum
606 Panicum virgatum
263 Parthenium integrifolium
151 Passiflora incarnata
118 Passiflora lutea
158 Penthorum sedoides
595 Phalaris oryzoides
297 Phlox glaberrima
129 Phryma leptostachya
128 Physalis viscosa
671 Phytolacca americana
547 Pinus balsamea
496 Pinus taeda
343 Plantago virginica
000 Platanus occidentalis
471 Platanus occidentalis
580 Poa capillaris
581 Poa capillaris
273 Poa flava
255 Podophyllum peltatum
249 Polemonium caeruleum
556 Polemonium dubium
157 Polygala cruciata
414 Polygala senega
563 Polygala verticillata
000 Polygala viridescens
382 Polygonum aviculare
000 Polygonum convolvulus
670 Polygonum persicaria
672 Polygonum persicaria
000 Polygonum sagittatum
000 Polygonum scandens
183 Polygonum virginianum
322 Polypodium lonchitis
768 Polypremum procumbens
087 Pontederia cordata
532 Populus heterophylla
679 Populus nigra
410 Portulaca oleracea
664 Potamogeton nutans
699 Potentilla reptans
015 Prenanthes alba
284 Prenanthes alba
319 Prenanthes alba
078 Prinos verticillatus
000 Prunus virginiana
627 Prunus virginiana
682 Pteris atropurpurea
339 Pulmonaria virginica
088 Pyrola maculata
000 Pyrus coronaria
000 Quercus alba
467 Quercus alba
000 Quercus nigra
000 Quercus phellos
000 Quercus prinus
000 Quercus rubra
316 Queria canadensis
317 Queria canadensis
701 Ranunculus abortivus
473 Ranunculus repens
710 Ranunculus repens
389 Renealmia usneoides
227 Rhexia virginica
488 Rhinanthus virginica
728 Rhus copallinum
492 Rhus glabra
238 Rhus radicans
000 Rhus toxicodendron
479 Rhus toxicodendron
681 Rhus vernix
050 Robinia pseudoacacia
634 Rubus caesius
703 Rubus fruticosus
490 Rudbeckia hirta
539 Rudbeckia laciniata
609 Rudbeckia oppositifolia
417 Rudbeckia purpurea
490 Rudbeckia purpurea
657 Rudbeckia triloba
085 Ruellia strepens
098 Ruellia strepens
494 Rumex acetosella
000 Rumex britannica
000 Rumex verticillatus
649 Sagina virginica
278 Sagittaria sagittifolia
527 Salicornia virginica
667 Salicornia virginica
432 Salsola kali
019 Salvia lyrata
391 Salvia lyrata
292 Salvia urticifolia
314 Samolus valerandii
247 Sanguinaria canadensis
000 Sanicula canadensis
000 Sanicula europaea
028 Sanicula marilandica
660 Saponaria officinalis
110 Sarothra gentianoides
559 Sarracenia flava
717 Sarracenia purpurea
197 Satureja origanoides
141 Satureja virginiana
107 Saururus cernuus
525 Saxifraga nivalis
304 Saxifraga pensylvanica
407 Scandix cerefolium

407 Scandix procumbens
033 Schwalbea americana
585 Schoenus glomeratus
380 Scirpus capitatus
570 Scirpus glomeratus
457 Scirpus retrofractus
456 Scirpus spadiceus
220 Scrophularia marilandica
000 Scrophularia nodosa
261 Scutellaria hyssopifolia
105 Scutellaria integrifolia
280 Scutellaria lateriflora
249 Senecio aureus
286 Senecio aureus
015 Serratula glauca
175 Serratula glauca
000 Serratula scariosa
651 Serratula scariosa
237 Serratula spicata
014 Serratula squarrosa
441 Sida abutilon
131 Sida rhombifolia
511 Sigesbeckia occidentalis
388 Silene antirrhina
423 Silene virginica
187 Silphium asteriscus
610 Silphium helianthoides
721 Sison canadense
528 Sisymbrium nasturtium-aquaticum
018 Sisyrinchium bermudiana
279 Sium rigidius
541 Smilax herbacea
082 Smilax lanceolata
617 Smilax laurifolia
082 Smilax pseudo-china
541 Smilax pseudo-china
561 Smilax pseudo-china
630 Smilax pseudo-china
081 Smilax sarsaparilla
464 Smyrnium aureum
549 Smyrnium integerrimum
430 Solanum nigrum var. vulgare
283 Solidago canadensis
283 Solidago sempervirens
733 Solidago sempervirens
139 Sonchus canadensis
071 Sophora tinctoria
434 Sparganium erectum
302 Spiraea aruncus
421 Spiraea aruncus
302 Spiraea opulifolia
290 Spiraea trifoliata
000 Staphylea trifolia
573 Statice limonium
621 Stipa avenacea
171 Swertia difformis
097 Tetragonotheca helianthoides
135 Teucrium canadense
443 Teucrium chamaepitys
117 Teucrium virginicum
291 Thapsia trifoliata
554 Tiarella cordifolia
000 Tilia americana
297 Tradescantia virginiana
309 Tragopogon virginicum
177 Trichostema dichotomum
092 Trifolium biflorum
289 Trifolium reflexum
390 Trifolium repens
000 Trillium sessile
626 Triosteum angustifolium
524 Ulmus americana
000 Uniola paniculata
508 Urtica cylindrica
246 Urtica pumila
515 Utricularia gibba
517 Utricularia gibba
031 Utricularia subulata
258 Uvularia perfoliata
537 Vaccinium frondosum
042 Vaccinium stamineum
043 Valeriana locusta var. radiata
299 Veratrum luteum
448 Verbena nodiflora
000 Verbena spuria
431 Verbena urticifolia
163 Verbesina alba
166 Verbesina virginica
161 Veronica anagallis-aquatica
368 Veronica arvensis
161 Veronica beccabunga
226 Veronica marilandica
367 Veronica serpyllifolia
428 Veronica virginica
543 Viburnum acerifolium
064 Viburnum nudum
047 Viburnum prunifolium
793 Viola palmata
254 Viola pedata
470 Viola primulifolia
506 Vitex agnus-castus
696 Vitis vinifera
502 Xanthium strumarium
219 Xyris indica
270 Yucca filamentosa
574 Zizania aquatica

Species and Collection Numbers of Vascular Plants Gathered by John Clayton and Indirectly Reported in Linnaeus' First Edition of Species Plantarum

000 Acer rubrum
000 Agrimonia eupatoria

000 Agrostis virginica
000 Amaranthus lividus
000 Andromeda arborea
000 Andromeda calyculata
000 Arethusa bulbosa
000 Aristolochia serpentaria
000 Asclepias syriaca
000 Atriplex laciniata
000 Betula lenta
000 Callicarpa americana
000 Carpinus ostrya
000 Celastrus scandens
000 Cercis canadensis
000 Chenopodium album
000 Crataegus crus-galli
000 Datura stramonium
000 Dirca palustris
000 Eupatorium perfoliatum
000 Euphorbia ipecacuanhae
000 Fagus pumila
000 Fraxinus americana
000 Gerardia purpurea
000 Gleditsia triacanthos
000 Ilex aquifolium
000 Juglans alba
000 Juglans nigra
000 Laurus aestivalis
000 Laurus borbonia
000 Lepidium virginicum
000 Liquidambar styraciflua
000 Lonicera marilandica
000 Lupinus perennis
000 Lycopsis virginica
000 Myrica cerifera
000 Nyssa aquatica
000 Oenothera biennis
000 Ornithogalum hirsutum
000 Osmunda claytoniana
000 Oxalis violacea
000 Panax quinquefolius
000 Platanus occidentalis
000 Polygala viridescens
000 Polygonum convolvulus
000 Polygonum sagittatum
000 Polygonum scandens
000 Prunus virginiana
000 Pyrus coronaria
000 Quercus alba
000 Quercus nigra
000 Quercus phellos
000 Quercus prinus
000 Quercus rubra
000 Rhus toxicodendron
000 Rumex britannica
000 Rumex verticillatus
000 Sanicula canadensis
000 Sanicula europaea
000 Scrophularia nodosa
000 Serratula scariosa
000 Staphylea trifolia
000 Tilia americana
000 Trillium sessile
000 Uniola paniculata
000 Verbena spuria
001 Cynanchus suberosum
003 Drosera rotundifolia
004 Galax aphylla
005 Lobelia cardinalis
008 Osmunda virginiana
009 Aster rigidus
009 Gerardia flava
010 Chelone glabra
010 Gentiana saponaria
011 Acrostichum areolatum
011 Osmunda regalis
013 Cicuta maculata
013 Helianthus angustifolius
014 Acrostichum platyneuros
014 Serratula squarrosa
015 Prenanthes alba
015 Serratula glauca
016 Liriodendron tulipifera
017 Dracontium foetidum
018 Sisyrinchium bermudiana
019 Leontodon dandelion
019 Salvia lyrata
020 Campanula perfoliata
021 Kalmia angustifolia
022 Mediola virginiana
024 Magnolia virginiana
var. foetida
027 Lycopodium alopecuroides
028 Mitchella repens
028 Sanicula marilandica
030 Andromeda mariana
031 Utricularia subulata
032 Azalea viscosa
033 Schwalbea americana
034 Magnolia virginiana
035 Convallaria racemosa
036 Oenothera fruticosa
039 Chelone hirsuta
040 Cypripedium calceolus
042 Aralia nudicaulis
042 Vaccinium stamineum
043 Crataegus coccinea
043 Valeriana locusta
var. radiata
044 Ornithogalum bivale
046 Chionanthus virginica
047 Viburnum prunifolium
049 Nyssa aquatica
050 Robinia pseudoacacia
052 Azalea lutea
053 Orontium aquaticum
054 Laurus benzoin
055 Crataegus tomentosa
056 Arabis lyrata
056 Laurus sassafras
058 Annona muricata

060 Houstonia caerulea
060 Mespilus canadensis
063 Houstonia purpurea
064 Viburnum nudum
065 Asclepias nivea
066 Arum triphyllum
067 Coix lacryma-jobi
069 Ceanothus americanus
070 Andropogon divaricatum
071 Sophora tinctoria
072 Aster dumosus
072 Aster linifolius
073 Andromeda paniculata
074 Aletris farinosa
075 Euonymus americanus
076 Limodorum tuberosum
077 Arethusa ophioglossoides
078 Prinos verticillatus
079 Hydrangea arborescens
080 Diospyros virginiana
081 Smilax sarsaparilla
082 Smilax lanceolata
082 Smilax pseudo-china
083 Asclepias decumbens
085 Hedysarum repens
085 Ruellia strepens
087 Pontederia cordata
088 Pyrola maculata
092 Trifolium biflorum
093 Commelina communis
093 Commelina erecta
094 Dioscorea villosa
097 Tetragonotheca heli-
anthoides
098 Ruellia strepens
099 Cactus opuntia
100 Bignonia crucigera
102 Cracca virginiana
103 Hedysarum violaceum
105 Scutellaria integrifolia
106 Cephalanthus occidentalis
107 Saururus cernuus
109 Helianthus giganteus
110 Sarothra gentianoides
111 Myosotis virginiana
112 Clitoria virginiana
113 Glycine tomentosa
116 Hedera quinquefolia
117 Teucrium virginicum
118 Passiflora lutea
120 Chironia dodecandra
121 Dolichos regularis
122 Hibiscus moscheutos
123 Cicuta maculata
124 Hedysarum nudiflorum
125 Angelica sylvestris
126 Crotalaria sagittalis
127 Glycine apios
128 Physalis viscosa
129 Phryma leptostachya
130 Mimulus ringens
131 Sida rhombifolia
133 Cacalia atriplicifolia
134 Melothria pendula
135 Hypericum setosum
135 Teucrium canadense
136 Helianthus atrorubens
137 Ludwigia alternifolia
138 Osteospermum uvedalia
139 Sonchus canadensis
140 Monarda punctata
141 Satureja virginiana
142 Buchnera americana
143 Aster divaricatus
146 Cassia ligustrina
147 Eupatorium scandens
148 Elephantopus tomentosus
151 Passiflora incarnata
152 Euphorbia polygonifolia
155 Euphorbia corollata
156 Cassia chamaecrista
157 Polygala cruciata
158 Penthorum sedoides
159 Baccharis foetida
161 Veronica anagallis-
aquatica
161 Veronica beccabunga
162 Eupatorium purpureum
163 Verbesina alba
164 Gratiola dubia
165 Erigeron camphoratum
166 Verbesina virginica
168 Hyssopus nepetoides
171 Swertia difformis
174 Hedysarum frutescens
175 Serratula glauca
177 Trichostema dichotomum
179 Eupatorium coelestinum
182 Glycine comosa
183 Polygonum virginianum
184 Hedysarum paniculatum
185 Lycopus virginicus
187 Ophiorrhiza mitreola
187 Silphium asteriscus
190 Hedysarum viridiflorum
191 Medicago virginica
192 Gerardia pedicularia
193 Carduus virginianus
194 Aster ericoides
195 Helianthus laevis
196 Lobelia cliffortiana
197 Satureja origanoides
198 Melissa nepeta
199 Ageratum altissimum
199 Geum virginianum
200 Oenothera mollissima
201 Acalypha virginica
201 Lonicera symphoricarpos
202 Helenium autumnale
203 Gnaphalium obtusifolium

206 Cenchrus tribuloides
208 Buphthalmum helianthoides
209 Hedysarum canescens
212 Monarda clinopodia
214 Lythrum verticillatum
215 Cicuta bulbifera
215 Cuscuta americana
216 Asclepias verticillata
219 Xyris indica
220 Scrophularia marilandica
221 Osteospermum uvedalia
222 Asclepias incarnata
223 Cynanchum suberosum
225 Bignonia radicans
226 Veronica marilandica
227 Rhexia virginica
228 Arum virginicum
230 Ascyrum hypericoides
232 Hypericum mutilum
233 Aralia spinosa
234 Eriocaulon decangulare
237 Serratula spicata
238 Rhus radicans
239 Aster grandiflorus
240 Baccharis halimifolia
242 Buphthalmum frutescens
243 Iva frutescens
244 Aster novae-angliae
245 Cucubalus stellatus
245 Monotropa uniflora
246 Urtica pumila
247 Sanguinaria canadensis
248 Burmannia biflora
249 Hydrophyllum virginianum
249 Polemonium caeruleum
249 Senecio aureus
250 Epigaea repens
251 Claytonia virginica
253 Iris verna
254 Viola pedata
255 Podophyllum peltatum
256 Amaryllis atamasca
256 Antirrhinum canadense
257 Cynoglossum virginianum
258 Uvularia perfoliata
259 Carex pseudocyperus
259 Iris virginica
260 Orchis spectabilis
261 Scutellaria hyssopifolia
263 Asclepias rubra
263 Parthenium integrifolium
267 Dipsacus fullonum
269 Anthericum calyculatum
270 Clematis vitalba
270 Yucca filamentosa
271 Betonica annua
273 Poa flava
276 Chelidonium glaucium
277 Diodia virginiana
278 Sagittaria sagittifolia
279 Sium rigidius
280 Scutellaria lateriflora
281 Lonicera symphoricarpos
282 Eryngium foetidum
283 Solidago canadensis
283 Solidago sempervirens
284 Prenanthes alba
286 Obolaria virginica
286 Senecio aureus
287 Gnaphalium plantaginifolia
288 Asarum canadense
289 Trifolium reflexum
290 Spiraea trifoliata
291 Thapsia trifoliata
292 Salvia urticifolia
293 Bartsia coccinea
294 Anemone thalictroides
295 Mespilus canadensis
297 Phlox glaberrima
297 Tradescantia virginiana
298 Chrysogonum virginianum
298 Coreopsis auriculata
299 Veratrum luteum
301 Heuchera americana
302 Spiraea aruncus
302 Spiraea opulifolia
304 Anchusa virginiana
304 Saxifraga pensylvanica
305 Actaea racemosa
307 Geranium maculatum
307 Ligusticum scothieum
308 Coreopsis verticillata
309 Tragopogon virginicum
310 Origanum vulgare
311 Ceanothus americanus
313 Galium bermudense
314 Samolus valerandii
316 Queria canadensis
317 Queria canadensis
319 Prenanthes alba
320 Adiantum pedatum
321 Adiantum pedatum
322 Polypodium lonchitis
328 Anemone hepatica
329 Panax trifolius
331 Lamium amplexicaule
332 Juncus campestris
333 Oenothera fruticosa
335 Convallaria polygonatum
338 Aquilegia canadensis
339 Pulmonaria virginica
340 Juncus bulbosus
341 Equisetum arvense
342 Cerastium semidecandrum
343 Plantago virginica
367 Veronica serpyllifolia
368 Veronica arvensis
372 Geranium carolinianum
374 Aphanes arvensis
376 Hyoseris virginica

378 Callitriche palustris
379 Gratiola virginiana
380 Scirpus capitatus
382 Polygonum aviculare
383 Leontodon dandelion
384 Cupressus distichia
385 Gnaphalium purpureum
386 Hieracium venosum
387 Orobanche uniflora
388 Silene antirrhina
389 Renealmia usneoides
390 Trifolium repens
391 Aster vernus
391 Salvia lyrata
393 Juncus effusus
394 Arabis lyrata
399 Mollugo verticillata
400 Arabis canadensis
404 Magnolia virginiana var. acuminata
407 Scandix cerefolium
407 Scandix procumbens
408 Dianthera americana
410 Portulaca oleracea
411 Clematis viorna
412 Monarda ciliata
414 Polygala senega
417 Rudbeckia purpurea
418 Lythrum petiolatum
419 Lysimachia quadrifolia
421 Spiraea aruncus
422 Melanthium virginicum
423 Silene virginica
424 Heuchera americana
425 Menispermum virginicum
428 Veronica virginica
429 Hydrocotyle umbellata
430 Solanum nigrum var. vulgare
431 Verbena urticifolia
432 Salsola kali
433 Lysimachia punctata
434 Sparganium erectum
435 Antirrhinum elatine
437 Nepeta virginica
438 Apocynum cannabinum
439 Eriocaulon decangulare
440 Linum virginianum
441 Sida abutilon
442 Amaranthus graecizans
443 Teucrium chamaepitys
444 Daucus carota
446 Elymus virginicus
447 Hieracium gronovii
448 Verbena nodiflora
449 Erigeron canadense
454 Panicum capillare
456 Scirpus spadiceus
457 Panicum sanguinale
457 Scirpus retrofractus
458 Panicum dichotomum
460 Andropogon virginicum
461 Eriophorum virginicum
462 Cardamine virginica
464 Smyrnium aureum
467 Quercus alba
470 Viola primulifolia
471 Platanus occidentalis
472 Arethusa bulbosa
473 Ranunculus repens
474 Oxalis stricta
475 Arenaria rubra var. marina
479 Rhus toxicodendron
480 Itea virginica
485 Laurus indica
487 Liquidambar styraciflua
488 Rhinanthus virginica
490 Rudbeckia hirta
490 Rudbeckia purpurea
492 Rhus glabra
494 Rumex acetosella
496 Pinus taeda
498 Agave virginca
500 Eryngium aquaticum
502 Xanthium strumarium
504 Convolvulus hederaceus
505 Lythrum lineare
506 Vitex agnus-castus
507 Agrostis virginica
508 Urtica cylindrica
509 Cyperus odoratus
510 Hedysarum hirtum
511 Sigesbeckia occidentalis
512 Ambrosia elatior
514 Melissa pulegioides
515 Utricularia gibba
516 Hedysarum marilandicum
517 Utricularia gibba
520 Laurus aestivalis
522 Caltha palustris
524 Ulmus americana
525 Draba verna
525 Saxifraga nivalis
526 Crataegus viridis
527 Salicornia virginica
528 Sisymbrium nasturtium-aquaticum
529 Alsine media
529 Anemone virginiana
530 Acer negundo
531 Liquidambar styraciflua
532 Populus heterophylla
537 Vaccinium frondosum
539 Rudbeckia laciniata
541 Smilax herbacea
541 Smilax pseudo-china
543 Viburnum acerifolium
544 Hamamelis virginiana
545 Leontice thalictroides

546 Menispermum canadense
547 Pinus balsamea
548 Ferula canadensis
549 Smyrnium integerrimum
552 Hypericum canadense
553 Convolvulus spithamaeus
554 Tiarella cordifolia
556 Itea virginica
556 Polemonium dubium
559 Sarracenia flava
560 Orchis ciliaris
561 Smilax pseudo-china
562 Cyperus arundinacea
563 Polygala verticillata
564 Hedysarum virginicum
565 Astragalus canadensis
567 Hibiscus virginicus
568 Dolichos polystachyus
569 Amaranthus spinosus
570 Scirpus glomeratus
571 Atriplex halimus
573 Statice limonium
574 Zizania aquatica
576 Celosia paniculata
577 Dactylis cynosuroides
578 Panicum virgatum
579 Panicum glaucum
580 Juncus filiformis
580 Poa capillaris
581 Arundo phragmites
581 Poa capillaris
582 Briza eragrostis
583 Dactylis cynosuroides
585 Schoenus glomeratus
586 Epilobium hirsutum
587 Oldenlandia uniflora
589 Holcus laxus
590 Holcus striatus
591 Panicum italicum
592 Glycine bracteata
594 Gratiola dubia
595 Phalaris oryzoides
599 Acnida cannabina
600 Andropogon divaricatum
601 Andropogon alopecuroides
602 Andropogon hirtum
603 Eupatorium aromaticum
604 Orobanche virginiana
605 Gentiana villosa
606 Andropogon virginicum
606 Panicum virgatum
607 Aster concolor
609 Rudbeckia oppositifolia
610 Lechea minor
610 Silphium helianthoides
614 Hedysarum virginicum
617 Smilax laurifolia
620 Eupatorium trifoliatum
621 Andropogon nutans
621 Stipa avenacea
624 Celtis occidentalis
625 Fumaria cucullaria
626 Triosteum angustifolium
627 Prunus virginiana
630 Smilax pseudo-china
632 Diospyros virginiana
634 Rubus caesius
635 Arethusa divaricata
639 Orchis flava
641 Convolvulus panduratus
646 Elatine hydropiper
647 Lithospermum virginianum
649 Sagina virginica
651 Serratula squarrosa
654 Mentha spicata var. viridis
655 Elephantopus scaber
657 Equisetum hyemale
657 Rudbeckia triloba
658 Ophrys lilifolia
660 Saponaria officinalis
664 Potamogeton nutans
665 Convolvulus repens
667 Coreopsis angustifolia
667 Salicornia virginica
668 Orchis psycodes
670 Polygonum persicaria
671 Phytolacca americana
672 Polygonum persicaria
673 Hamamelis virginiana
674 Onoclea sensibilis
679 Populus nigra
681 Rhus vernix
682 Pteris atropurpurea
684 Myrica asplenifolia
685 Acrostichum polypodioides
688 Betula nigra
691 Erythronium dens-canis
696 Vitis vinifera
699 Potentilla reptans
701 Ranunculus abortivus
703 Rubus fruticosus
704 Asarum virginicum
708 Ophrys lilifolia
710 Ranuculus repens
714 Onoclea sensibilis
717 Sarracenia purpurea
719 Myrica asplenifolia
721 Sison canadense
723 Alisma subulata
724 Ambrosia trifida
728 Rhus copallinum
732 Bunias cakile
733 Solidago sempervirens
741 Oxalis longiflora
745 Arabis canadensis
767 Aster divaricatus
768 Polypremum procumbens
774 Ammannia ramosior
793 Viola palmata
884 Juniperus virginiana

Species of Vascular Plants from Temperate North America Attributed to Peter Kalm by Linnaeus in Species Plantarum or in the Linnaean Herbarium

Acalypha virginica
Acer negundo
Acer pensylvanicum
Acer rubrum
Acer saccharinum
Adiantum pedatum
Agrostis virginica
Allium canadense
Amaranthus retroflexus
Andromeda mariana
Andromeda paniculata
Andromeda racemosa
Andropogon nutans
Anemone quinquefolia
Anemone thalictroides
Anemone virginiana
Angelica sylvestris
Antirrhinum canadense
Arabis canadensis
Arabis lyrata
Aralia spinosa
Arenaria rubra var. marina
Arethusa bulbosa
Arethusa ophioglossoides
Aristolochia serpentaria
Asarum canadense
Asclepias nivea
Asclepias tuberosa
Asplenium rhizophyllum
Aster concolor
Aster cordifolius
Aster laevis
Aster linariifolius
Aster novi-belgii
Aster puniceus
Aster undulatus
Astragalus canadensis
Avena pensylvanica
Avena spicata
Azalea lutea
Azalea viscosa
Bartsia coccinea
Briza eragrostis
Bromus ciliatus
Bromus purgans
Cacalia atriplicifolia
Carex folliculata
Carex squarrosa
Carpinus betulus
Cassia nictitans
Ceanothus americanus
Celastrus myrtifolius
Celtis occidentalis
Cenchrus tribuloides
Cephalanthus occidentalis
Cercis canadense
Chaerophyllum arborescens
Chelone glabra
Chenopodium anthelminticum
Chenopodium virginicum
Chironia angularis
Chironia campanulata
Chrysocoma graminifolia
Chrysosplenium oppositifolium
Cicuta bulbifera
Cicuta maculata
Cinna arundinacea
Cistus canadensis
Claytonia virginica
Collinsonia canadensis
Convolvulus spithamaeus
Conyza asteroides
Cornus canadensis
Cornus florida
Cracca virginiana
Crataegus coccinea
Crataegus crus-galli
Crataegus tomentosa
Crotalaria sagittalis
Cucubalus stellatus
Cupressus thyoides
Cuscuta americana
Cynoglossum virginianum
Cyperus strigosus
Dalibarda repens
Datisca hirta
Dianthera americana
Diospyros virginiana
Dracocephalum virginianum
Dracontium foetidum
Elymus canadensis
Erigeron philadelphicum
Eupatorium rotundifolium
Euphorbia corollata
Euphorbia ipecacuanhae
Euphorbia polygonifolia
Euphorbia portulacoides
Euonymus americanus
Fagus pumila
Galium tinctorium
Galium trifidum
Gentiana quinquefolia
Gentiana saponaria
Geranium carolinianum
Gerardia flava
Gerardia pedicularia
Gerardia purpurea
Gleditsia triacanthos
Glycine apios
Glycine bracteata
Glycine comosa
Gnaphalium margaritaceum
Gnaphalium obtusifolium
Gnaphalium plantaginifolium

Gnaphalium purpureum
Gratiola virginiana
Hamamelis virginiana
Hedera quinquefolia
Hedysarum hirtum
Hedysarum violaceum
Helianthus decapetalus
Heuchera americana
Hibiscus palustris
Hieracium gronovii
Hieracium kalmii
Hieracium paniculatum
Hippophae canadensis
Hordeum jubatum
Houstonia caerulea
Houstonia purpurea
Hydrangea arborescens
Hydrocotyle americana
Hydrocotyle umbellata
Hyoseris virginica
Hypericum canadense
Hypericum kalmianum
Hypericum mutilum
Impatiens noti-tangere
Iris verna
Juglans alba
Lactuca canadensis
Laurus sassafras
Lilium canadense
Limodorum tuberosum
Linum virginianum
Liquidambar peregrina
Liquidambar styraciflua
Liriodendron tulipifera
Lobelia cliffortiana
Lobelia kalmii
Ludwigia alternifolia
Lupinus perennis
Lycopodium alopecuroides
Lycopodium apodum
Lycopodium complanatum
Lycopodium obscurum
Lycopodium rupestre
Magnolia virginiana
var. glauca
Medeola virginica
Melanthium virginicum
Melissa pulegioides
Menispermum canadense
Mentha canadensis
Mespilus arbutifolia
Mespilus canadensis
Mitella diphylla
Mollugo verticillata
Monotropa uniflora
Morus rubra
Nymphaea lotus
Nymphaea lutea
Nyssa aquatica
Oenothera fruticosa
Ophrys cernua
Ophrys lilifolia
Orchis psycodes
Origanum vulgare
Ornithogalum hirsutum
Orobanche virginiana
Osmunda cinnamomea
Osmunda regalis
Osmunda virginiana
Oxalis stricta
Oxalis violacea
Panax quinquefolius
Panicum clandestinum
Panicum crusgalli
Panicum dichotomum
Panicum dissectum
Panicum filiforme
Panicum latifolium
Phlox maculata
Phlox subulata
Pinus strobus
Pinus taeda
Plantago virginica
Poa capillaris
Polygala incarnata
Polygala lutea
Polygala sanguinea
Polygala verticillata
Polygala viridescens
Polygonum articulatum
Polygonum erectum
Polygonum pensylvanicum
Polypodium marginale
Polypodium noveboracense
Polymnia canadensis
Pontederia cordata
Potentilla canadensis
Prenanthes alba
Prinos glaber
Prinos verticillatus
Pteris atropurpurea
Pulmonaria virginica
Pyrola maculata
Pyrola umbellata
Quercus alba
Quercus nigra
Quercus phellos
Quercus prinus
Quercus rubra
Ranunculus abortivus
Rhexia virginica
Rhus glabra
Rhus radicans
Rhus toxicodendron
Rhus vernix
Ribes cynosbati
Rubus canadensis
Rubus hispidus
Rubus occidentalis
Rumex persicarioides

Salvia lyrata
Sambucus canadensis
Sanguinaria canadensis
Sanguisorba canadensis
Sarothra gentianoides
Satureja origanoides
Saxifraga nivalis
Saxifraga pensylvanica
Schoenus glomeratus
Scirpus capitatus
Scutellaria hyssopifolia
Scutellaria integrifolia
Senecio canadensis
Serratula praealta
Serratula spicata
Silene nocturna
Silene virginica
Sison canadense
Sisyrinchium bermudiana
Smilax caduca
Smilax pseudo-china
Smilax rotundifolia
Smilax tamnoides
Smyrnium aureum
Solidago canadensis
Solidago flexicaulis
Solidago lateriflora
Sonchus canadensis
Sophora tinctoria
Spiraea opulifolia
Spiraea tomentosa
Spiraea trifoliata
Swertia corniculata
Thalictrum dioicum
Thapsia trifoliata
Thesium umbellatum
Thuja occidentalis
Trogopogon virginicum
Trifolium arvense
Trifolium biflorum
Trillium cernuum
Trillium erectum
Ulmus americana
Uniola spicata
Urtica capitata
Urtica cylindrica
Urtica divaricata
Urtica pumila
Utricularia subulata
Uvularia perfoliata
Uvularia sessilifolia
Vaccinium album
Vaccinium corymbosum
Vaccinium frondosum
Vaccinium hispidulum
Vaccinium ligustrinum
Vaccinium mucronatum
Vaccinium stamineum
Veratrum luteum
Viburnum acerifolium
Viburnum lentago
Viburnum prunifolium
Viola canadensis
Viola lanceolata
Viola pedata
Viscum terrestre
Vitis labrusca
Vitis laciniosa
Vitis vinifera
Vitis vulpina
Xyris indica

Selected Literature Cited by Linnaeus in the First Edition of Species Plantarum for Seemingly Temperate North American Vascular Plants

Bauhin
Acnida cannabina
Adiantum pedatum
Amaranthus lividus
Cornus canadensis
Diospyros virginiana
Helianthus multiflorus
Hibiscus palustris
Laurus sassafras
Othonna cineraria
Rhus glabra
Rudbeckia laciniata
Sarracenia flava
Sarracenia purpurea
Smilax bona-nox
Spiraea hypericifolia
Tradescantia virginiana
Trillium erectum
Uvularia perfoliata
Verbena nodiflora
Vitis labrusca

Catesby
Acer rubrum
Amaryllis atamasca
Andromeda arborea
Andromeda paniculata
Annona glabra
Annona triloba
Arethusa divaricata
Aristolochia serpentaria
Azalea viscosa
Bignonia caerulea
Bignonia radicans
Bignonia sempervirens
Callicarpa americana
Chionanthus virginica
Cissampelos smilacina
Clethra alnifolia
Cornus florida
Cupressus distichia
Diospyros virginiana

Dodecatheon meadia
Erythrina herbacea
Fagus pumila
Fraxinus americana
Gentiana saponaria
Gleditsia triacanthos
Hamamelis virginiana
Ilex cassine
Ipomoea carolina
Juglans alba
Juglans nigra
Kalmia angustifolia
Kalmia latifolia
Laurus borbonia
Laurus sassafras
Lilium canadense
Liriodendron tulipifera
Lonicera marilandica
Magnolia virginiana
var. acuminata
Magnolia virginiana
var. foetida
Magnolia virginiana
var. glauca
Magnolia virginiana
var. tripetala
Mitchella repens
Monotropa uniflora
Myrica cerifera
Nyssa aquatica
Panax quinquefolius
Philadelphus inodorus
Platanus occidentalis
Podophyllum peltatum
Populus balsamifera
Prunus virginiana
Quercus alba
Quercus nigra
Quercus phellos
Quercus prinus
Quercus rubra
Rhododendron maximum
Robinia pseudoacacia
Rudbeckia purpurea
Rumex sanguineus
Sarracenia flava
Sarracenia purpurea
Sloanea emarginata
Smilax laurifolia
Smilax tamnoides
Stewartia malacodendron
Trillium cernuum
Trillium sessile
Uniola paniculata
Viscum purpureum
Viscum ruburm

Colden
Acer rubrum
Ambrosia elatior
Aralia racemosa
Azalea lutea
Azalea viscosa
Collinsonia canadensis
Cucubalus stellatus
Dracontium foetidum
Eupatorium perfoliatum
Eupatorium purpureum
Eupatorium scandens
Gaultheria procumbens
Hamamelis virginiana
Hieracium venosum
Holosteum succulentum
Kalmia angustifolia
Laurus sassafras
Leontice thalictroides
Mitella diphylla
Monarda didyma
Myrica asplenifolia
Pinus strobus
Pinus taeda
Polygonum sagittatum
Polygonum scandens
Pontederia cordata
Rhus glabra
Rumex britannica
Saxifraga pensylvanica
Staphylea trifolia
Trillium cernuum
Uvularia perfoliata
Uvularia sessilifolia
Veronica virginica

Cornuti
Actaea spicata var. alba
Adiantum pedatum
Ageratum altissimum
Angelica atropurpurea
Angelica lucida
Aquilegia canadensis
Aralia racemosa
Asarum canadense
Asclepias incarnata
Asclepias syriaca
Aster annuus
Bignonia radicans
Convallaria racemosa
Convallaria stellata
Eupatorium purpureum
Fumaria cucullaria
Fumaria sempervirens
Glycine apios
Hedera quinquefolia
Hedysarum canadense
Helenium autumnale
Hibiscus moscheutos
Monarda fistulosa
Polypodium bulbiferum
Rhus radicans
Rubus odoratus

Rudbeckia laciniata
Sanguinaria canadensis
Sanguisorba canadensis
Solidago sempervirens
Thalictrum cornutii
Trillium erectum
Uvularia perfoliata

Dillenius
Actaea racemosa
Asclepias amoena
Asclepias purpurascens
Asclepias tuberosa
Asclepias variagata
Aster ericoides
Aster grandiflorus
Aster miser
Astragalus canadensis
Astragalus carolinianus
Baccharis foetida
Bidens nivea
Bidens pilosa
Canna glauca
Carduus altissimus
Clematis crispa
Clematis viorna
Clitoria virginiana
Commelina communis
Commelina erecta
Convolvulus carolinus
Coreopsis lanceolata
Crotalaria perfoliata
Erythrina herbacea
Eupatorium coelestinum
Eupatorium hyssopifolium
Geranium carolinianum
Glycine tomentosa
Gnaphalium obtusifolium
Gnaphalium purpureum
Hedysarum marilandicum
Hedysarum volubile
Helianthus atrorubens
Horminum virginicum
Ipomoea lacunosa
Ipomoea tamnifolia
Iris versicolor
Lonicera symphoricarpos
Lycopodium alopecuroides
Lycopodium apodum
Lycopodium carolinianum
Lycopodium obscurum
Magnolia virginiana
var. glauca
Malva caroliniana
Mensipermum virginicum
Parthenium integrifolium
Phaseolus helvulus
Phlox glaberrima
Polemonium rubrum
Polygonum scandens
Ptelea trifoliata
Rhus glabra
Rhus radicans
Ribes oxyacanthoides
Rosa carolina
Rubus occidentalis
Rudbeckia hirta
Ruellia biflora
Ruellia strepens
Sanguinaria canadensis
Saxifraga pensylvanica
Serratula glauca
Serratula praealta
Serratula spicata
Serratula squarrosa
Silene antirrhina
Silphium asteriscus
Solanum carolinense
Solanum virginianum
Solidago altissima
Solidago caesia
Spermacoce tenuior
Tetragonotheca helianthoides
Trichostema brachiatum
Triosteum perfoliatum

Gronovius
Acer negundo
Acer rubrum
Acnida cannabina
Acrostichum areolatum
Acrostichum platyneuros
Actaea racemosa
Adiantum pedatum
Agave virginica
Ageratum altissimum
Aletris farinosa
Alisma subulata
Amarathus graecizans
Amaranthus lividus
Amaryllis atamasca
Ambrosia elatior
Ambrosia trifida
Anchusa virginiana
Andromeda arborea
Andromeda mariana
Andromeda paniculata
Andropogon alopecuroides
Andropogon divaricatum
Andropogon virginicum
Anemone thalictroides
Anemone virginiana
Antirrhinum canadense
Apocynum cannabinum
Aquilegia canadensis
Arabis canadensis
Arabis lyrata
Aralia spinosa
Arethusa bulbosa
Arethusa divaricata

Arethusa ophioglossoides
Aristolochia serpentaria
Arum virginicum
Asarum canadense
Asarum virginicum
Asclepias decumbens
Asclepias incarnata
Asclepias rubra
Asclepias syriaca
Asclepias verticillata
Ascyrum hypericoides
Aster concolor
Aster divaricatus
Aster dumosus
Aster ericoides
Aster grandiflorus
Aster linifolius
Aster novae-angliae
Aster rigidus
Aster vernus
Azalea lutea
Azalea viscosa
Baccharis foetida
Baccharis halimifolia
Bartsia coccinea
Betula lenta
Betula nigra
Bignonia radicans
Buchnera americana
Buphthalmum helianthoides
Burmannia biflora
Cacalia atriplicifolia
Callicarpa americana
Campanula perfoliata
Cardamine virginica
Carduus virginianus
Cassia marilandica
Ceanothus americanus
Celastrus scandens
Celosia paniculata
Celtis occidentalis
Cenchrus tribuloides
Cephalanthus occidentalis
Cercis canadensis
Chelone glabra
Chelone hirsuta
Chionanthus virginica
Chironia dodecandra
Chrysogonum virginianum
Cicuta bulbifera
Cicuta maculata
Claytonia virginica
Clematis viorna
Clitoria virginiana
Commelina communis
Commelina erecta
Convallaria racemosa
Convolvulus panduratus
Convolvulus repens
Convolvulus spithamaeus
Coreopsis angustifolia
Coreopsis auriculata
Coreopsis verticillata
Cornus florida
Cracca virginiana
Crataegus coccinea
Crataegus crus-galli
Crataegus tomentosa
Crataegus viridis
Cucubalus stellatus
Cupressus distichia
Cuscuta americana
Cynoglossum virginianum
Cyperus arundinacea
Cyperus odoratus
Dianthera americana
Diodia virginiana
Dioscorea villosa
Diospyros virginiana
Dirca palustris
Dolichos polystachyus
Dolichos regularis
Dracontium foetidum
Elephantopus tomentosus
Elymus virginicus
Epigaea repens
Erigeron camphoratum
Eriocaulon decangulare
Eriophorum virginicum
Eryngium aquaticum
Eupatorium aromaticum
Eupatorium coelestinum
Eupatorium perfoliatum
Eupatorium purpureum
Eupatorium scandens
Eupatorium trifoliatum
Euphorbia corollata
Euphorbia ipecacuanhae
Euphorbia polygonifolia
Euonymus americanus
Fagus pumila
Ferula canadensis
Fraxinus americana
Fumaria cucullaria
Galax aphylla
Galium bermudense
Gentiana saponaria
Gentiana villosa
Geranium carolinianum
Gerardia flava
Gerardia pedicularia
Gerardia purpurea
Geum virginianum
Gleditsia triacanthos
Glycine apios
Glycine bracteata
Glycine comosa
Glycine tomentosa
Gnaphalium obtusifolium
Gnaphalium plantaginifolium

Gnaphalium purpureum
Gratiola dubia
Gratiola virginiana
Hamamelis virginiana
Hedera quinquefolia
Hedysarum frutescens
Hedysarum hirtum
Hedysarum marilandicum
Hedysarum nudiflorum
Hedysarum paniculatum
Hedysarum repens
Hedysarum violaceum
Hedysarum virginicum
Hedysarum viridiflorum
Helenium autumnale
Helianthus angustifolius
Helianthus atrorubens
Helianthus giganteus
Helianthus laevis
Heuchera americana
Hibiscus moscheutos
Hibiscus virginicus
Hieracium gronovii
Hieracium venosum
Holcus laxus
Holcus striatus
Houstonia caerulea
Houstonia purpurea
Hydrangea arborescens
Hydrocotyle umbellata
Hydrophyllum virginianum
Hyoseris virginica
Hypericum mutilum
Hypericum setosum
Hyssopus nepetoides
Iris verna
Iris virginica
Itea virginica
Juglans alba
Juglans nigra
Juniperus virginiana
Kalmia angustifolia
Kalmia latifolia
Laurus aestivalis
Laurus benzoin
Laurus borbonia
Laurus sassafras
Lechea minor
Leontice thalictroides
Leontodon dandelion
Limodorum tuberosum
Linum virginianum
Liriodendron tulipifera
Lithospermum virginianum
Lobelia cardinalis
Lobelia cliffortiana
Lonicera marilandica
Lonicera symphoricarpos
Ludwigia alternifolia
Lupinus perennis
Lycopodium alopecuroides
Lycopsis virginica
Lycopus virginicus
Lysimachia quadrifolia
Lythrum lineare
Lythrum petiolatum
Lythrum verticillatum
Magnolia virginiana
Magnolia virginiana
var. acuminata
Magnolia virginiana
var. foetida
Medeola virginiana
Medicago virginica
Melanthium virginicum
Melissa pulegioides
Menispermum canadense
Menispermum virginicum
Mespilus canadensis
Mimulus ringens
Mitchella repens
Monarda ciliata
Monarda clinopodia
Monarda punctata
Monotropa uniflora
Myosotis virginiana
Myrica asplenifolia
Myrica cerifera
Nepeta virginica
Nyssa aquatica
Obolaria virginica
Oenothera fruticosa
Oldenlandia uniflora
Onoclea sensibilis
Ophiorrhiza mitreola
Orchis ciliaris
Orchis flava
Orchis psycodes
Orchis spectabilis
Ornithogalum bivale
Ornithogalum hirsutum
Orobanche uniflora
Orobanche virginiana
Orontium aquaticum
Osmunda virginiana
Osteospermum uvedalia
Oxalis stricta
Oxalis violacea
Panax quinquefolius
Panax trifolius
Panicum dichotomum
Panicum virgatum
Parthenium integrifolium
Penthorum sedoides
Phalaris oryzoides
Phlox glaberrima
Phryma leptostachya
Pinus balsamea
Pinus taeda
Plantago virginica

Platanus occidentalis
Poa capillaris
Poa flava
Podophyllum peltatum
Polemonium dubium
Polygala cruciata
Polygala senega
Polygala verticillata
Polygala viridescens
Polygonum sagittatum
Polygonum scandens
Polygonum virginianum
Populus heterophylla
Pontederia cordata
Prenanthes alba
Prinos verticillatus
Prunus virginiana
Pteris atropurpurea
Pulmonaria virginica
Pyrola maculata
Pyrus coronaria
Quercus alba
Quercus nigra
Quercus phellos
Quercus prinus
Quercus rubra
Queria canadensis
Ranunculus abortivus
Rhexia virginica
Rhinanthus virginica
Rhus copallinum
Rhus glabra
Rhus radicans
Rhus toxicodendron
Robinia pseudoacacia
Rudbeckia hirta
Rudbeckia laciniata
Rudbeckia oppositifolia
Rudbeckia purpurea
Rudbeckia triloba
Ruellia strepens
Rumex britannica
Rumex verticillatus
Salvia lyrata
Salvia urticifolia
Sanguinaria canadensis
Sanicula canadensis
Sanicula marilandica
Sarothra gentianoides
Sarracenia flava
Sarracenia purpurea
Satureja origanoides
Satureja virginiana
Saururus cernuus
Saxifraga pensylvanica
Scandix procumbens
Schwalbea americana
Schoenus glomeratus
Scirpus capitatus
Scrophularia marilandica
Scutellaria hyssophifolia
Scutellaria integrifolia
Scutellaria lateriflora
Senecio aureus
Serratula glauca
Serratula scariosa
Serratula spicata
Serratula squarrosa
Sigesbeckia occidentalis
Silene antirrhina
Silene virginica
Silphium asteriscus
Silphium helianthoides
Sison canadense
Sium rigidius
Smilax herbacea
Smilax lanceolata
Smilax laurifolia
Smyrnium aureum
Smyrnium integerrimum
Solidago canadensis
Solidago sempervirens
Sonchus canadensis
Sophora tinctoria
Spiraea opulifolia
Spiraea trifoliata
Staphylea trifolia
Stipa avenacea
Swertia difformis
Tetragonotheca helianthoides
Teucrium canadense
Teucrium virginicum
Thapsia trifoliata
Tilia americana
Tradescantia virginiana
Trgopogon virginicum
Trichostema dichotomum
Trifolium biflorum
Trifolium reflexum
Trillium sessile
Triosteum angustifolium
Ulmus americana
Uniola paniculata
Urtica pumila
Utricularia gibba
Utricularia subulata
Uvularia perfoliata
Vaccinium frondosum
Vaccinium stamineum
Valeriana locusta
var. radiata
Veratrum luteum
Verbena nodiflora
Verbena spuria
Verbena urticifolia
Verbesina virginica
Veronica marilandica
Veronica virginica
Viburnum acerifolium
Viburnum nudum

Viburnum prunifolium
Viola palmata
Viola pedata
Yucca filamentosa

Hermann
Acer rubrum
Ambrosia elatior
Anemone virginiana
Arum dracontium
Asclepias purpurascens
Asclepias tuberosa
Aster dumosus
Aster novae-angliae
Aster novi-belgii
Aster puniceus
Aster undulatus
Baccharis halimifolia
Bidens bipinnata
Campanula americana
Cynanchum hirtum
Eupatorium purpureum
Geum virginianum
Helianthus strumosus
Heuchera americana
Juglans nigra
Liriodendron tulipifera
Mespilus arbutifolia
Mitella diphylla
Napaea hermaphrodita
Ranunculus abortivus
Satureja virginiana
Senecio hieracifolius
Solidago flexicaulis
Solidago rigida
Solidago sempervirens
Staphylea trifolia
Verbena hastata

Linnaeus Hort. Cliff.
Acer negundo
Ageratum altissimum
Amaranthus hypocondriacus
Amaryllis atamasca
Ambrosia trifida
Amorpha fruticosa
Andromeda paniculata
Angelica lucida
Apocynum androsaemifolium
Aralia racemosa
Aralia spinosa
Arethusa ophioglossoides
Aristolochia arborescens
Arum virginicum
Asclepias incarnata
Asclepias syriaca
Asclepias tuberosa
Ascyrum hypericoides
Aster annuus
Aster dumosus
Aster linifolius
Aster novae-angliae
Aster novi-belgii
Aster puniceus
Aster tradescantii
Aster undulatus
Azalea lutea
Baccharis halimifolia
Bartsia coccinea
Bidens pilosa
Bignonia capreolata
Bignonia radicans
Burmannia biflora
Cacalia porophyllum
Cactus pentagonus
Campanula perfoliata
Canna glauca
Cassia marilandica
Cassia nictitans
Ceanothus americanus
Cephalanthus occidentalis
Cercis canadensis
Chelone glabra
Chionanthus virginica
Chrysanthemum serotinum
Chrysogonum virginianum
Coix dactyloides
Collinsonia canadensis
Commelina communis
Commelina erecta
Convallaria racemosa
Coreopsis lanceolata
Cornus florida
Cracca virginiana
Crataegus coccinea
Crotalaria alba
Cupressus distichia
Cynanchum hirtum
Diodia virginiana
Diospyros virginiana
Dracocephalum virginianum
Erythrina herbacea
Eupatorium perfoliatum
Eupatorium purpureum
Eupatorium scandens
Euonymus americanus
Fumaria cucullaria
Fumaria sempervirens
Geum virginianum
Gleditsia triacanthos
Glycine apios
Glycine frutescens
Hedera quinquefolia
Hedysarum canadense
Hedysarum volubile
Helenium autumnale
Helianthus multiflorus
Helianthus strumosus
Heuchera americana
Hibiscus moscheutos

Houstonia caerulea
Hydrophyllum virginianum
Hyssopus nepetoides
Ilex cassine
Juglans nigra
Juniperus virginiana
Jussiaea erecta
Laurus benzoin
Laurus borbonia
Laurus sassafras
Liriodendron tulipifera
Lobelia cardinalis
Lobelia cliffortiana
Lobelia inflata
Lobelia siphilitica
Lonicera symphoricarpos
Ludwigia alternifolia
Lycopodium alopecuroides
Magnolia virginiana
Malva caroliniana
Menispermum canadense
Mespilus arbutifolia
Mitella diphylla
Monarda didyma
Monarda fistulosa
Monarda punctata
Myrica asplenifolia
Myrica cerifera
Napaea hermaphrodita
Nepeta virginica
Nyssa aquatica
Obolaria virginica
Onoclea sensibilis
Ophiorrhiza mitreola
Osteospermum uvedalia
Parthenium integrifolium
Phlox glaberrima
Platanus occidentalis
Podophyllum peltatum
Polygonum sagittatum
Polygonum virginianum
Populus balsamifera
Pontederia cordata
Prenanthes alba
Ptelea trifoliata
Quercus prinus
Quercus rubra
Rhus radicans
Robinia pseudoacadia
Rubus odoratus
Rudbeckia laciniata
Ruellia strepens
Rumex sanguineus
Sanguinaria canadensis
Sanguisorba canadensis
Sarracenia flava
Sarracenia purpurea
Satureja virginiana
Saururus cernuus
Senecio hieracifolius
Serratula squarrosa
Silphium asteriscus
Sison canadense
Smilax lanceolata
Smyrnium aureum
Solanum carolinense
Solanum diphyllum
Solanum tomentosum
Solidago canadensis
Solidago rigida
Spiraea hypericifolia
Spiraea opulifolia
Spiraea trifoliata
Staphylea trifolia
Tradescantia virginiana
Trichostema dichotomum
Uniola paniculata
Uvularia perfoliata
Verbena nodiflora
Verbena urticifolia
Veronica virginica

Linnaeus Hort. Upsal.
Acer rubrum
Ageratum altissimum
Amaranthus hypocondriacus
Ambrosia elatior
Ambrosia trifida
Amorpha fruticosa
Angelica lucida
Aquilegia canadensis
Aralia racemosa
Asclepias syriaca
Aster annuus
Aster novi-belgii
Aster tradescantii
Bidens pilosa
Bignonia radicans
Buphthalmum helianthoides
Cacalia suaveolens
Campanula perfoliata
Cassia marilandica
Cassia nictitans
Ceanothus americanus
Cercis canadensis
Commelina communis
Commelina erecta
Coreopsis alternifolia
Coreopsis tripteris
Cornus florida
Crataegus coccinea
Cucubalus stellatus
Cupressus distichia
Erigeron camphoratum
Eupatorium altissimum
Eupatorium perfoliatum
Eupatorium scandens
Eupatorium sessilifolium
Euonymus americanus
Fumaria sempervirens

Gleditsia triacanthos
Glycine apios
Helenium autumnale
Helianthus multiflorus
Hibiscus moscheutos
Hyssopus nepetoides
Juglans nigra
Jussiaea erecta
Liriodendron tulipifera
Lobelia cardinalis
Lobelia inflata
Ludwigia alternifolia
Malva caroliniana
Menispermum canadense
Monarda fistulosa
Monarda punctata
Myrica cerifera
Osteospermum uvedalia
Podophyllum peltatum
Ribes oxyacanthoides
Robinia pseudoacacia
Rubus odoratus
Rudbeckia laciniata
Rudbeckia triloba
Ruellia strepens
Rumex sanguineus
Sanicula marilandica
Saururus cernuus
Scrophularia marilandica
Senecio hieracifolius
Solidago altissima
Solidago canadensis
Spiraea hypericifolia
Spiraea trifoliata
Tradescantia virginiana
Verbena hastata
Verbena spuria
Verbena urticifolia

Linnaeus Amoen. Acad.
Bartsia coccinea
Cornus canadensis
Polgala cruciata
Polygala lutea
Polygala senega
Polygala verticillata
Polygala viridescens
Rhododendron maximum
Trillium erectum
Uvularia perfoliata
Viola canadensis

Linnaeus Materia Medica
Actaea racemosa
Aristolochia serpentaria
Ilex cassine
Laurus benzoin
Laurus sassafras
Panax quinquefolius
Polygala senega
Rhus copallinum
Rhus vernix
Rumex britannica
Rumex sanguineus

Linnaeus Nova Plantarum Genera
Agave virginica
Arethusa bulbosa
Arethusa ophioglossoides
Cracca virginiana
Elymus canadensis
Epigaea repens
Gaultheria procumbens
Gaura biennis
Helonias bullata
Holosteum succulentum
Kalmia angustifolia
Kalmia latifolia
Lechea major
Lechea minor
Mitchella repens
Mitella diphylla
Napaea dioica
Onoclea sensibilis
Orontium aquaticum
Phryma leptostachya
Sarothra gentianoides
Veratrum luteum

Linnaeus Virid. Cliffort.
Aralia racemosa
Aralia spinosa
Asclepias incarnata
Asclepias syriaca
Bignonia capreolata
Commelina communis
Commelina erecta
Hyssopus nepetoides
Monarda fistulosa
Rudbeckia laciniata
Solanum carolinense
Solanum diphyllum

Martyn
Aster grandiflorus
Buphthalmum helianthoides
Cassia marilandica
Coreopsis lanceolata
Crotalaria alba
Limodorum tuberosum
Malva caroliniana
Solidago altissima

Mitchell
Acnida cannabina
Callicarpa americana
Chelone penstemon
Cracca virginiana
Galax aphylla
Hamamelis virginiana

Hedera quinquefolia
Itea virginica
Mitchella repens
Onoclea sensibilis
Phryma leptostachya
Proserpinaca palustris
Stewartia malacodendron

Morison
Acrostichum platyneuros
Actaea spicata var. alba
Adiantum pedatum
Ageratum altissimum
Alisma coridfolia
Amaryllis atamasca
Ambrosia artemisiifolia
Ambrosia elatior
Ambrosia trifida
Anchusa virginiana
Angelica lucida
Apocynum androsaemifolium
Apocynum cannabinum
Aquilegia canadensis
Aralia racemosa
Arethusa ophioglossoides
Aristolochia serpentaria
Asarum canadense
Asarum virginicum
Aster annuus
Aster cordifolius
Aster linifolius
Aster puniceus
Aster tradescantii
Aster undulatus
Baccharis halimifolia
Bartsia coccinea
Bidens bipinnata
Bidens frondosa
Bignonia radicans
Buphthalmum helianthoides
Cacalia atriplicifolia
Cacalia porophyllum
Campanula perfoliata
Carduus virginianus
Cenchrus tribuloides
Chrysanthemum serotinum
Cicuta maculata
Coix dactyloides
Convallaria racemosa
Convallaria stellata
Coreopsis alternifolia
Coreopsis auriculata
Coreopsis tripteris
Cynanchum hirtum
Cyperus arundinacea
Dracocephalum virginianum
Elymus canadensis
Eriophorum virginicum
Eupatorium altissimum
Eupatorium aromaticum
Eupatorium hyssopifolium
Eupatorium perfoliatum
Eupatorium purpureum
Eupatorium rotundifolium
Eupatorium sessilifolium
Fumaria sempervirens
Gentiana saponaria
Glycine apios
Gnaphalium obtusifolium
Gnaphalium purpureum
Hedysarum canadense
Helenium autumnale
Helianthus divaricatus
Helianthus giganteus
Helianthus strumosus
Helonias bullata
Hibiscus moscheutos
Houstonia caerulea
Hydrophyllum virginianum
Hyssopus nepetoides
Lilium canadense
Lithospermum virginianum
Lobelia cardinalis
Lobelia siphilitica
Lupinus perennis
Lycopodium alopecuroides
Monarda ciliata
Monotropa uniflora
Nepeta virginica
Obolaria virginica
Onoclea sensibilis
Orchis ciliaris
Orobanche virginiana
Osteospermum uvedalia
Oxalis stricta
Panicum latifolium
Plantago virginica
Poa capillaris
Polygonum virginianum
Polypodium bulbiferum
Polypodium virginianum
Pontederia cordata
Pulmonaria virginica
Rudbeckia hirta
Rudbeckia laciniata
Rudbeckia purpurea
Rudbeckia triloba
Salvia lyrata
Salvia urticifolia
Sanguisorba canadensis
Sarracenia flava
Sarracenia purpurea
Satureja origanoides
Satureja virginiana
Scandix procumbens
Scutellaria lateriflora
Senecio aureus
Serratula spicata
Serratula squarrosa
Silphium trifoliatum

Sison canadense
Sium rigidius
Smyrnium aureum
Solidago canadensis
Solidago sempervirens
Spiraea trifoliata
Staphylea trifoliata
Thalictrum cornutii
Tradescantia virginiana
Trillium erectum
Uvularia perfoliata
Verbena urticifolia
Yucca filamentosa

Parkinson
Juglans alba
Platanus occidentalis
Thalictrum cornutii

Petiver
Acrostichum areolatum
Asclepias verticillata
Baccharis halimifolia
Eriocaulon decangulare
Glycine comosa
Helianthus angustifolius
Lysimachia quadrifolia
Mitchella repens
Myrica asplenifolia
Ornithogalum hirsutum
Osmunda cinnamomea
Osmunda virginiana
Poa flava
Polypodium virginianum
Polypremum procumbens
Pontederia cordata
Pyrola maculata
Rudbeckia purpurea
Scutellaria hssopifolia
Trifolium comosum

Plukenet
Acer negundo
Acer rubrum
Acrostichum platyneuros
Actaea racemosa
Adiantum pedatum
Aletris farinosa
Amaryllis atamasca
Ambrosia artemisiifolia
Anchusa virginiana
Andromeda mariana
Andromeda paniculata
Anemone quinquefolia
Anemone thalictroides
Apocynum cannabinun
Arabis canadensis
Aralia spinosa
Arethusa bulbosa
Arethusa ophioglossoides
Aristolochia arborescens
Aristolochia serpentaria
Arum dracontium
Asarum virginicum
Asclepias variegata
Asclepias verticillata
Ascyrum crux-andreae
Ascyrum hypericoides
Ascyrum villosum
Aster divaricatus
Aster dumosus
Aster linariifolius
Aster mutabilis
Aster tenuifolius
Azalea lutea
Azalea viscosa
Baccharis halimifolia
Bartsia coccinea
Betula nigra
Bidens bipinnata
Bignonia sempervirens
Buphthalmum helianthoides
Cacalia atriplicifolia
Cacalia porophyllum
Callicarpa americana
Cardamine virginica
Cassia nictitans
Ceanothus americanus
Celastrus bullatus
Celosia paniculata
Cenchrus tribuloides
Cephalanthus occidentalis
Chaerophyllum arborescens
Chelone glabra
Chelone hirsuta
Chrysanthemum serotinum
Chrysognoum virginianum
Cicuta maculata
Claytonia virginica
Clethra alnifolia
Coix dactyloides
Convallaria racemosa
Conyza asteroides
Conyza bifrons
var. flosculosa
Conyza linifolia
Coreopsis alternifolia
Coreopsis auriculata
Coreopsis verticillata
Cornus florida
Cracca virginiana
Crataegus coccinea
Cupressus distichia
Cupressus thyoides
Cyperus arundinacea
Epigaea repens
Eriocaulon decangulare
Eriophorum virginicum
Eryngium aquaticum
Eupatorium aromaticum

Eupatorium coelestinum
Eupatorium hyssopifolium
Eupatorium perfoliatum
Eupatorium rotundifolium
Eupatorium scandens
Euphorbia maculata
Euonymus americanus
Fagus pumila
Fumaria cucullaria
Galium bermudense
Gaura biennis
Gerardia flava
Gerardia pedicularia
Gerardia purpurea
Gleditsia triacanthos
Gnaphalium plantaginifolium
Hamamelis virginiana
Hedysarum canescens
Hedysarum paniculatum
Helianthus giganteus
Helonias bullata
Heuchera americana
Hibiscus virginicus
Hieracium venosum
Horminum virginicum
Houstonia caerulea
Houstonia purpurea
Hypericum setosum
Hyssopus nepetoides
Ilex cassine
Iris verna
Juglans alba
Jussiaea erecta
Kalmia angustifolia
Kalmia latifolia
Laurus benzoin
Laurus indica
Laurus sassafras
Liriodendron tulipifera
Ludwigia alternifolia
Lysimachia quadrifolia
Magnolia virginiana
var. glauca
Medeola virginiana
Medicago virginica
Menispermum canadense
Mitchella repens
Monarda ciliata
Monarda punctata
Monotropa uniflora
Morus rubra
Myosotis virginiana
Myrica asplenifolia
Myrica cerifera
Nepeta virginica
Nyssa aquatica
Obolaria virginica
Oldenlandia uniflora
Onoclea sensibilis
Ornithogalum hirsutum
Orobanche uniflora
Osteospermum uvedalia
Oxalis violacea
Panax trifolius
Parthenium integrifolium
Phlox divaricata
Phlox ovata
Phlox paniculata
Phlox pilosa
Phlox setacea
Phlox subulata
Pinus balsamea
Pinus strobus
Pinus taeda
Plantago virginica
Polygala cruciata
Polygala lutea
Polygala verticillata
Polygonum arifolium
Polygonum sagittatum
Polygonum scandens
Polypodium bulbiferum
Pontederia cordata
Prenanthes alba
Prenanthes altissima
Prunus virginiana
Ptelea trifoliata
Pulmonaria virginica
Pyrola maculata
Quercus prinus
Quercus rubra
Rhexia mariana
Rhexia virginica
Rhus copallinum
Rhus vernix
Ribes oxyacanthoides
Robinia pseudoacacia
Rudbeckia hirta
Rudbeckia purpurea
Rudbeckia triloba
Sarothra gentianoides
Sarracenia flava
Sarracenia purpurea
Satureja origanoides
Satureja virginiana
Saururus cernuus
Saxifraga pensylvanica
Schwalbea americana
Scirpus retrofractus
Scutellaria integrifolia
Serratula glauca
Serratula praealta
Serratula scariosa
Serratula spicata
Silphium helianthoides
Smilax bona-nox
Smilax herbacea
Smilax lanceolata
Smyrnium aureum
Solanum diphyllum

Solanum verbascifolium
Solanum virginianum
Solidago flexicaulis
Solidago latifolia
Solidago sempervirens
Spermacoce tenuior
Spiraea hypericifolia
Spiraea trifoliata
Thesium umbellatum
Tilia americana
Trifolium reflexum
Trillium sessile
Triosteum angustifolium
Uniola paniculata
Urtica divaricata
Vaccinium hispidulum
Vaccinium stamineum
Viburnum prunifolium
Viola palmata
Viola pedata
Vitis arborea
Vitis labrusca
Vitis vulpina
Yucca filamentosa

Ray - Hist. Pl.
Acrostichum platyneuros
Adiantum pedatum
Amaranthus hybridus
Ambrosia artemisiifolia
Ambrosia elatior
Ambrosia trifida
Aristolochia serpentaria
Asclepias incarnata
Ascyrum crux-andreae
Ascyrum hypericoides
Aster linariifolius
Baccharis halimifolia
Bartsia coccinea
Betula nigra
Bignonia capreolata
Bignonia sempervirens
Buphthalmum helianthoides
Carduus virginianus
Ceanothus americanus
Celtis occidentalis
Cenchrus tribuloides
Cercis canadensis
Chaerophyllum arborescens
Chelone glabra
Chrysanthemum serotinum
Chrysogonum virginianum
Cicuta bulbifera
Coreopsis alternifolia
Coreopsis auriculata
Coreopsis tripteris
Cucubalus stellatus
Cyperus odoratus
Dioscorea villosa
Diospyros virginiana
Diospyros virginiana
Dodecatheon meadia
Elymus canadensis
Eupatorium altissimum
Eupatorium hyssopifolium
Eupatorium perfoliatum
Eupatorium purpureum
Eupatorium sessilifolium
Eupatorium trifoliatum
Euphorbia polygonifolia
Euonymus americanus
Fumaria cucullaria
Galium bermudense
Gerardia pedicularia
Hedysarum canescens
Hedysarum marilandicum
Helenium autumnale
Houstonia caerulea
Houstonia purpurea
Juniperus virginiana
Lactuca canadensis
Lechea minor
Lonicera marilandica
Lycopodium alopecuroides
Magnolia virginiana
var. glauca
Magnolia virginiana
var. grisea
Mimulus ringens
Obolaria virginica
Orchis ciliaris
Orchis psycodes
Orobanche virginiana
Osmunda cinnamomea
Phlox maculata
Phlox pilosa
Pinus balsamea
Pinus taeda
Plantago virginica
Plantago incarnata
Polygala lutea
Polygala senega
Polygala verticillata
Polygonum virginianum
Polypodium virginianum
Quercus nigra
Quercus phellos
Quercus prinus
Rhus toxicodendron
Robinia pseudoacacia
Rubus occidentalis
Rudbeckia hirta
Rudbeckia purpurea
Sanguinaria canadensis
Sanicula marilandica
Scrophularia marilandica
Scutellaria integrifolia
Senecio aureus
Silphium trifoliatum
Smilax herbacea

Smilax lanceolata
Smyrnium aureum
Solidago caesia
Spiraea trifoliata
Trichostema dichotomum
Vaccinium hispidulum
Valeriana locusta
var. radiata
Vitis vulpina

Ray - Banister, 1688
Chelone hirsuta
Clematis viorna
Gerardia flava
Gerardia purpurea
Hieracium venosum
Napaea dioica
Serratula scariosa
Serratula spicata

Ray - Petiver Hort. Sicc.
Asclepias decumbens
Chionanthus virginica
Clematis viorna
Clitoria mariana
Polygala lutea
Trichostema dichotomum
Trifolium biflorum
Viola pedata

Royen
Acer negundo
Adiantum pedatum
Amaryllis atamasca
Ambrosia trifida
Amorpha fruticosa
Andropogon virginicum
Anemone virginiana
Angelica atropurpurea
Angelica lucida
Apocynum androsaemifolium
Aralia racemosa
Aralia spinosa
Arum dracontium
Asclepias incarnata
Asclepias syriaca
Asclepias tuberosa
Aster annuus
Aster cordifolius
Aster dumosus
Aster ericoides
Aster grandiflorus
Aster linifolius
Aster novae-angliae
Aster puniceus
Aster tradescantii
Aster undulatus
Astragalus carolinianus
Baccharis halimifolia
Bidens nivea
Bignonia capreolata
Bignonia sempervirens
Cactus pentagonus
Campanula americana
Campanula perfoliata
Cassia marilandica
Ceanothus americanus
Cephalanthus occidentalis
Cercis canadensis
Chionanthus virginica
Chrysanthemum serotinum
Coix dactyloides
Commelina communis
Commelina erecta
Convallaria racemosa
Coreopsis alternifolia
Coreopsis lanceolata
Coreopsis tripteris
Cornus florida
Crataegus coccinea
Crotalaria alba
Cupressus distichia
Cynanchum hirtum
Cyperus odoratus
Diospyros virginiana
Dracocephalum virginianum
Erythrina herbacea
Eupatorium perfoliatum
Eupatorium purpureum
Eupatorium scandens
Fagus pumila
Fraxinus americana
Fumaria cucullaria
Fumaria sempervirens
Geranium carolinianum
Glycine apios
Glycine frutescens
Gnaphalium purpureum
Gomphrena interrupta
Hedera quinquefolia
Hedysarum canadense
Hedysarum canescens
Hedysarum volubile
Helenium autumnale
Helianthus multiflorus
Helianthus strumosus
Heuchera americana
Hibiscus moscheutos
Hydrophyllum virginianum
Hyssopus nepetoides
Ilex cassine
Juglans nigra
Juniperus virginiana
Laurus benoin
Laurus borbonia
Laurus sassafras
Limodorum tuberosum
Liriodendron tulipifera
Lobelia cardinalis
Lobelia inflata

Lobelia siphilitica
Lonicera symphoricarpos
Ludwigia alternifolia
Lupinus perennis
Magnolia virginica
Mespilus arbutifolia
Mitella diphylla
Monarda fistulosa
Monarda punctata
Myrica cerifera
Napaea hermaphrodita
Orchis ciliaris
Ornithogalum hirsutum
Osteosperma uvedalia
Phaseolus helvulus
Phlox glaberrima
Phryma leptostachya
Platanus occidentalis
Podophyllum peltatum
Polygonum sagittatum
Polygonum virginianum
Polypodium bulbiferum
Pontederia cordata
Populus balsamifera
Prunus virginiana
Quercus prinus
Quercus rubra
Ranunculus abortivus
Rhus copallinum
Rhus radicans
Rhus vernix
Robinia pseudoacacia
Rubus odoratus
Rudbeckia laciniata
Ruellia strepens
Rumex sanguineus
Sanguisorba canadensis
Satureja virginiana
Saururus cernuus
Scutellaria lateriflora
Senecio hieracifolius
Serratula squarrosa
Silene antirrhina
Silphium asteriscus
Silphium trifoliatum
Sison canadense
Smyrnium aureum
Solanum carolinense
Solanum diphyllum
Solanum tomentosum
Solanum virginianum
Solidago canadensis
Solidago flexicaulis
Solidago rigida
Sonchus floridanus
Spermacoce tenuior
Spiraea hypericifolia
Spiraea opulifolia
Spiraea trifoliata
Staphylea trifoliata
Thalictrum cornutii
Tradescantia virginiana
Trichostema dichotomum
Trifolium comosum
Uniola paniculata
Uvularia perfoliata
Verbena hastata
Verbena nodiflora
Verbena urticifolia
Veronica virginica

Tournefort
Amaranthus hypocondriacus
Aster novae-angliae
Astragalus canadensis
Bidens frondosa
Chelone glabra
Circaea lutetiana
var. canadensis
Lactuca canadensis
Lilium canadense
Lobelia kalmii
Menispermum canadense
Mentzelia aspera
Oenothera fruticosa
Oxalis stricta
Polygonum scandens
Rhus toxicodendron
Teucrium canadense

Vaillant
Alsima cordifolia
Bidens nivea
Coreopsis verticillata
Panax quinquefolius
Panax trifolius
Prenanthes alba
Sanicula canadensis
Sonchus floridanus
Viburnum prunifolium

Synonymies for Some of the Vascular Plants Reported for Temperate North America in Linnaeus' First Edition of Species Plantarum

Acrostichum areolatum =
Woodwardia areolata
Acrostichum platyneuros =
Asplenium platyneuron
Acrostichum polypodioides =
Polypodium polypodioides
Actaea racemosa =
Cimicifuga racemosa
Actaea spicata var. alba =
Actaea pachypoda
Agrostis virginica =
Sporobolus virginicus
Alisma cordifolia =
Echinodorus cordifolius

Alisma subulata =
Sagittaria subulata
Alsine media =
Stellaria media
Amaryllis atamasca =
Zephyranthes atamasca
Ambrosia elatior =
Ambrosia artemisiifolia var. elatior
Ammannia ramosior =
Rotala ramosior
Andromeda arborea =
Oxydendrum arboreum
Andromeda calyculata =
Chamaedaphne calyculata
Andromeda mariana =
Lyonia mariana
Andromeda paniculata =
Leucothoe racemosa
Andromda racemosa =
Leucothoe racemosa
Andropogon alopecuroides =
Erianthus alopecuroides
Andropogon divaricatum =
Erianthus alopecuroides
Andropogon hirtum =
Hyparrhenia hirta
Andropogon nutans =
Sorghastrum nutans
Anemone hepatica =
Hepatica nobilis
Anemone thalictroides =
Anemonella thalictroides
Annona triloba =
Asimina triloba
Antirrhinum canadense =
Linaria canadensis
Antirrhinum elatine =
Kickxia elatine
Aphanes arvensis =
Alchemillaarvensis
Arbutus uva-ursi =
Arctostaphylos uva-ursi
Arenaria rubra var. marina
= Spergularia marina
Arethusa divaricata =
Cleistes divaricata
Arethusa ophioglossoides =
Pogonia ophioglossoides
Arenica maritima =
Senecio pseudoarnica
Arum dracontium =
Arisaema dracontium
Arum triphyllum =
Arisaema triphyllum
Arum virginicum =
Peltandra virginica
Arundo phragmites =
Phragmites australis
Asclepias amoena =
Asclepias purpurascens
Asclepias decumbens =
Asclepias tuberosa
Ascyrum crux-andreae =
Hypericum crux-andreae
Ascyrum hypericoides =
Hypericum hypericoides
Ascyrum villosum =
Hypericum setosum
Aster annuus =
Erigeron annuus
Aster vernus =
Erigeron vernus
Avena pensylvanica =
Trisetum pensylvanicum
Avena spicata =
Trisetum spicatum
Azalea lutea =
Rhododendron nudiflorum
Azalea viscosa =
Rhododendron viscosum
Baccharis foetida =
Pluchea foetida
Bartsia coccinea =
Castilleja coccinea
Betonica annua =
Stachys annua
Bidens nivea =
Melanthera nivea
Bignonia catalpa =
Catalpa bignonioides
Bignonia crucigera =
Bignonia capreolata
Bignonia radicans =
Campsis radicans
Bignonia sempervirens =
Gelsemium sempervirens
Briza eragrostis =
Eragrostis cilianensis
Bunias cakile =
Cakile maritima
Buphthalmum frutescens =
Borrichia frutescens
Buphthalmum helianthoides =
Kallias helianthoides
Cacalia atriplicifolia =
Arnoglossum atriplicifolium
Cacalia porophyllum =
Porophyllum ruderale
Cacalia suaveolens =
Hasteola suaveolens
Cactus opuntia =
Opuntia vulgaris
Cactus pentagonus =
Cereus pentagonus
Campanula perfoliata =
Triodanis perfoliata
Cardamine virginica =
Sibara virginica

Carduus altissimus =
Cirsium altissimum
Carduus virginianus =
Cirsium virginianum
Carpinus ostrya =
Ostrya virginiana
Celastrus bullatus =
Celastrus scandens
Celosia paniculata =
Iresine paniculata
Chaerophyllum arborescens =
Aralia spinosa
Chelidonium glaucium =
Glaucium flavum
Chelone hirsuta =
Penstemon hirsutus
Chelone penstemon =
Penstemon laevigatus
Chenopodium anthelminticum =
Chenopodium ambrosioides
Chironia angularis =
Sabatia angularis
Chironia campanulata =
Sabatia campanulata
Chironia dodecandra =
Sabatia dodecandra
Chrysocoma graminifolia =
Euthamia graminifolia
Cissampelos smilacina =
Menispermum canadense
Cistus canadensis =
Helianthemum canadense
Clinopodium incanum =
Pycnanthemum incanum
Clitoria virginiana =
Centrosema virginiana
Coix dactyloides =
Tripsacum dactyloides
Convallaria polygonatum =
Polygonatum officinale
Convallaria racemosa =
Smilacina racemosa
Convallaria stellata =
Smilacina stellata
Convolvulus carolinus =
Ipomoea trichocarpa
Convolvulus panduratus =
Ipomoea pandurata
Convolvulus repens =
Calystegia sepium
Convolvulus spithamaeus =
Calystegia spithamaea
Conzya asteroides =
Sericocarpus asteroides
Conyza linifolia =
Sericocarpus linifolius
Coreopsis alternifolia =
Verbesina alternifolia
Coreopsis angustifolia =
Helianthus angustifolia
Cracca virginiana =
Tephrosia virginiana
Crotalaria alba =
Baptisia alba
Crotalaria perfoliata =
Baptisia perfoliata
Cucubalus stellatus =
Silene stellata
Cupressus distichia =
Taxodium distichium
Cupressus thysoides =
Chamaecyparis thyoides
Cynanchum suberosum =
Matelea suberosa
Cynosurus aegyptius =
Dactyloctenium aegyptium
Cyperus arundinacea
Dulichium arundinaceum
Dactylis cynosuroides =
Spartina cynosuroides
Datisca hirta =
Rhus hirta
Dianthera americana =
Justicia americana
Dolichos polystachyus =
Phaseolus polystachyus
Dolichos regularis =
Galactia regularis
Dracocephalum virginianum =
Physostegia virginiana
Dracontium foetidum =
Symplocarpus foetidus
Elymus hystrix =
Hystrix patula
Erigeron camphoratum =
Pluchea camphorata
Erigeron canadense =
Conyza canadensis
Eupatorium altissimum =
Ageratina altissima
Eupatorium aromaticum =
Ageratina aromatica
Eupatorium coelestinum =
Conoclinium coelestinum
Eupatorium scandens =
Mikania scandens
Eupatorium trifoliatum =
Eupatorium purpureum
Euphorbia portulacoides =
Euphorbia ipecacuanhae
Fagus pumila =
Castanea pumila
Ferula canadensis =
Ligusticum canadense
Fumaria cucullaria =
Dicentra cucullaria
Fumaria sempervirens =
Corydalis sempervirens
Gentiana quinquefolia =
Gentianella quinquefolia

Gerardia flava =
Aureolaria flava
Gerardia pedicularia =
Aureolaria pedicularia
Gerardia purpurea =
Agalinis purpurea
Glycine apios =
Apios americana
Glycine bracteata =
Amphicarpa bracteata
Glycine comosa =
Amphicarpa bracteata
Glycine frutescens =
Wisteria frutescens
Glycine tomentosa =
Rhynchosia tomentosa
Gnaphalium margaritaceum =
Anaphalis margaritacea
Gnaphalium plantaginifolium =
Antennaria plantaginifolia
Gnaphalium purpureum =
Gamochaeta purpurea
Gomphrena interrupta =
Froelichia interrupta
Gratiola dubia =
Lindernia dubia
Guilandina dioica =
Gymnocladus dioica
Hedera quinquefolia =
Parthenocissus quinquefolia
Hedysarum canadense =
Desmodium canadense
Hedysarum canescens =
Desmodium canescens
Hedysarum frutescens =
Lespedeza violacea
Hedysarum hirtum =
Lespedeza hirta
Hedysarum marilandicum =
Desmodium marilandicum
Hedysarum nudiflorum =
Desmodium nudiflorum
Hedysarum paniculatum =
Desmodium paniculatum
Hedysarum repens =
Lespedeza repens
Hedysarum violaceum =
Lespedeza violacea
Hedysarum virginicum =
Lespedeza virginica
Hedysarum viridiflorum =
Desmodium viridiflorum
Hedysarum volubile =
Galactia volubilis
Helianthus laevis =
Bidens laevis
Helianthus multiflorus =
Helianthus decapetalus
Helleborus trifolius =
Coptis trifolia
Hibiscus palustris =
Hibiscus moscheutos
Hibiscus virginicus =
Kosteletzkya virginica
Hippophae canadensis =
Shepherdia canadensis
Holcus laxus =
Uniola laxa
Holcus striatus =
Sacciolepis striata
Holosteum succulentum =
Honkenya peploides
Horminum virginicum =
Salvia lyrata
Hyoseris virginica =
Krigia virginica
Hypericum lasianthus =
Gordonia lasianthus
Hyssopus nepetoides =
Agastache nepetoides
Ipomoea nyctelea =
Ellisia nyctelea
Ipomoea tamnifolia =
Jacquemontia tamnifolia
Juglans alba =
Carya tomentosa
Juncus campestris =
Luzula campestris
Jussiaea erecta =
Ludwigia erecta
Laurus aestivalis =
Litsea aestivilis
Laurus benzoin =
Lindera benzoin
Laurus borbonia =
Persea borbonia
Laurus indica =
Persea indica
Laurus sassafras =
Sassafras albidum
Laurus winterana =
Canella winterana
Lechea major =
Helianthemum canadense
Leontice thalictroides =
Caulophyllum thalictroides
Leontodon dandelion =
Krigia dandelion
Lilum camschatcense =
Fritillaria camschatcensis
Limodorum tuberosum =
Calopogon tuberosus
Liquidambar peregrina =
Comptonia peregrina
Lithospermum virginianum =
Onosmodium virginianum

Lonicera marilandica =
Spigelia marilandica
Lonicera symphoricarpos =
Symphoricarpos orbiculata
Lycopodium apodum =
Selaginella apoda
Lycopsis virginica =
Myosotis verna
Lythrum petiolatum =
Cuphea petiolata
Magnolia virginiana
var. acuminata =
Magnolia acuminata
Magnolia virginiana
var. foetida =
Magnolia grandiflora
Magnolia virginiana
var. glauca =
Magnolia virginiana
Magnolia virginiana
var. grisea =
Magnolia virginiana
Magnolia virginiana
var. tripetala =
Magnolia tripetala
Malva caroliniana =
Modiola caroliniana
Medicago virginica =
Lespedeza virginica
Melissa nepeta =
Calamintha nepeta
Melissa pulegioides =
Hedeoma pulegioides
Menispermum carolinum =
Cocculus carolinus
Menispermum virginicum =
Cocculus carolinus
Mentha spicata var. viridis =
Mentha spicata
Mespilus arbutifolia =
Aronia arbutifolia
Mespilus canadensis =
Amelanchier canadensis
Monarda ciliata =
Blephilia ciliata
Monotropa hypopithys =
Hypopithys monotropa
Myosotis virginiana =
Hackelia virginiana
Myrica asplenifolia =
Comptonia cerifera
Myrica cerifera =
Comptonia cerifera
Napaea hermaphrodita =
Sida hermaphrodita
Nymphaea lutea =
Nuphar luteum
Nymphaea nelumbo =
Nelumbo lutea (ours)
Ophiorrhiza mitreola =
Cynoctonum mitreola
Ophrys lilifolia =
Liparis linifolia
Orchis ciliaris =
Platanthera ciliaris
Orchis flava =
Platanthera flava
Orchis psycodes =
Platanthera psycodes
Orchis spectabilis =
Galearis spectabilis
Ornithogalum bivale =
Allium bivale
Ornithogalum hirsutum
Hypoxis hirsuta
Orbanche virginiana =
Epifagus virginiana
Osmunda virginiana =
Botrychium virginianum
Osteospermum uvedalia =
Smallanthus uvedalia
Oxalis longiflora =
Oxalis violacea
Pancratium carolinianum =
Hymenocallis caroliniana
Panicum clandestinum =
Dichanthelium clandestinum
Panicum crusgalli =
Echinochloa crusgalli
Panicum dichotomum =
Dichanthelium dichotomum
Panicum dissectum =
Paspalum dissectum
Panicum filiforme =
Digitaria filiformis
Panicum glaucum =
Setaria glauca
Panicum italicum =
Setaria italica
Panicum latifolium =
Dichanthelium latifolium
Panicum sanguinale =
Digitaria sanguinalis
Phalaris oryzoides =
Leersia oryzoides
Phaseolus helvulus =
Strophostyles helvola
Phlox ovata =
Ruellia caroliniensis
Phlox setacea =
Phlox subulata var. setacea
Pinus balsamea =
Abies balsamea
Pistacia simaruba =
Bursera simaruba
Poa capillaris =
Eragrostis capillaris
Poa flava =

Tridens flavus
Podophyllum diphyllum =
Jeffersonia diphylla
Polemonium dubium =
Phacelia dubia
Polygala viridescens =
Polygala sanguinea
Polygonum articulatum =
Polygonella articulata
Polypodium bulbiferum =
Cystopteris bulbifera
Polypodium lonchitis =
Polystichum lonchitis
Polypodium marginale =
Dryopteris marginalis
Polypodium noveboracense =
Thelypteris noveboracensis
Polypodium phegopteris =
Thelypteris phegoteris
Prinos glaber =
Ilex glabra
Prinos verticillatus =
Ilex verticillata
Pteris atropurpurea =
Pellaea atropurpurea
Pulmonaria virginica =
Mertensia virginica
Pyrus coronaria =
Malus coronaria
Queria canadensis =
Paronychia canadensis
Renealmia usneoides =
Tillandsia usneoides
Rhinanthus virginica =
Aureolaria virginica
Rhus radicans =
Toxicodendron radicans
Rhus toxicodendron =
Toxicodendron quercifolia
Rhus vernix =
Toxicodendron vernix
Rudbeckia oppositifolia =
Kallias helianthoides
Rudbeckia purpurea =
Echinacea purpurea
Sagina virginica =
Bartonia virginica
Salsola prostrata =
Kochia prostrata
Sarothra gentianoides =
Hypericum gentianoides
Satureja origanoides =
Cunila origanoides
Satureja virginiana =
Pycnanthemum virginianum
Scandix cerefolium =
Anthriscus cerefolium
Scandix procumbens =
Chaerophyllum procumbens
Schoenus glomeratus =
Rhyschospora glomerata
Scirpus retrofractus =
Cyperus retrofractus
Scirpus spadiceus =
Fimbristylis spadicea
Scutellaria hyssopifolia =
Scutellaria integrifolia
Senecio hieracifolius =
Erechitites hieracifolia
Serratula glauca =
Vernonia glauca
Serratula noveboracensis =
Vernonia noveboracensis
Serratula praealta =
Vernonia noveboracensis
Serratula scariosa =
Liatris scariosa
Serratula spicata =
Liatris spicata
Serratula squarrosa =
Liatris squarrosa
Sida abutilon =
Abutilon theophrastii
Sida crispa =
Malva crispa
Sigesbeckia occidentalis =
Verbesina occidentalis
Silphium helianthoides =
Kallias helianthoides
Silphium solidaginoides =
Kallias helianthoides
Sison canadense =
Cryptotaenia canadensis
Sisymbrium nasturtium-aquaticum =
Nasturtium officinale
Sium rigidius =
Oxypolis rigidus
Smilax caduca =
Smilax rotundifolia
Smyrnium aureum =
Zizia aurea
Smyrnium integerrimum =
Taenidia integerrima
Solidago altissima =
Solidago canadensis
Solidago lateriflora =
Aster lateriflorus
Solidago latifolia =
Solidago flexicaulis
Sonchus floridanus =
Lactuca floridana
Sophora tinctoria =
Baptisia tinctoria
Spiraea aruncus =
Aruncus sylvester
Spiraea opulifolia =
Physocarpus opulifolius
Spiraea trifoliata =

Porteranthus trifoliatus
Statice armeria =
Armeria maritima
Swertia difformis =
Sabatia difformis
Teucrium chamaepitys =
Ajuga chamaepitys
Teucrium virginicum =
Teucrium canadense
Thapsia trifoliata =
Thaspium trifoliatum
Thesium umbellatum =
Comandra umbellata
Tragopogon virginicum =
Krigia virginica
Trifolium biflorum =
Stylosanthes biflora
Uniola spicata =
Distichlis spicata
Urtica canadensis =
Laportea canadensis
Urtica cylindrica =
Boehmeria cylindrica
Urtica divaricata =
Laportea canadensis
Urtica pumila =
Pilea pumila
Vaccinium frondosum =
Gaylussacia frondosa
Vaccinium hispidulum =
Gaultheria hispidula
Vaccinium ligustrinum =
Lyonia ligustrina
Vaccinium mucronatum =
Nemopanthus mucronata
Valeriana locusta var. radiata
= Valerianella radiata
Veratrum luteum =
Chamaelirium luteum
Verbena nodiflora =
Lippa nodiflora
Verbena spuria =
Verbena officinalis
Verbesina alba =
Eclipta alba
Veronica marilandica =
Polypremum procumbens
Veronica virginica =
Veronicastrum virginicum
Viscum rubrum =
Phoradendron rubrum
Viscum terrestre =
Lysimachia terrestris
Vitis arborea =
Ampelopsis arborea
Vitis laciniosa =
Vitis vulpina

From the raw data above, it can be noted that Linnaeus mentions 889 species from temperate North America. Of that number 13 are varieties leaving a total of 876 species. Two of the varieties, Magnolia virginiana var. glauca and Solanum nigrum var. vulgare, can be considered equivalent to the modern declarations of var. virginiana and var. nigrum in each instance. One species, Ornithogalum canadense, is based solely upon South African material and Linnaeus misnamed it. Most likely he meant "capense".

Linnaeus gives habitat references for nearly all of his species. In the above review, 108 are referred to "America". This was variously defined by Linnaeus to include North America or the Americas, meaning both North and South America. Those species which are strictly stated by Linnaeus to be only from South America (but have synonymies based on North American elements) are not included. Canada is given for 162 species, while 80 (including five varieties of Magnolia virginiana) are given as occurring in the Carolinas. Maryland is credited with a total of 18 species with Pennsylvania (or Philadelphia) given for 44 species. Linnaeus assigns four species to Florida, two to Mississippi, five to New York, and one each to New England and New Jersey. The largest number of species are referred to Virginia. He refers 421 species and varieties to Virginia.

To be sure Linnaeus often referred a species to more than a single area, and thus the total is greater than the number of species considered, by Linnaeus, to be strictly from these areas. Even so, fully 47% of the species considered by Linnaeus to be from temperate North America (even if not stated as such) were considered to occur in Virgi-

nia. Only 18% of the plants were mentioned as being from Canada, while 12% came from America.

A number of temperate North American species were mentioned in Linnaeus' first edition of Species plantarum in synonymy, but the geographic range given by him did not include an area within temperate North America. Linnaeus gives the range of 47 species as occurring somewhere in the New World but not specifically in the temperate region. For 86 species Linnaeus gives the range as occurring in both temperate North America and somewhere else in the World. This usually refers to species which Linnaeus believed occurred in both Europe and the Americas. In 79 instances, synonyms based on temperate North American species are cited, but the geographical range does not even mention the New World or temperate North America. Mostly, Linnaeus is referring to weed species gathered in temperate North America prior to 1753.

Linnaeus named 14 species for America, 37 for Canada, 10 for the Carolinas, nine for Maryland, four for New York, five for Pennsylvania or Philadelphia, and 63 for Virginia. He named one species each for Florida and New England.

Linnaeus named some North American species for early explorers. Three species were named for Peter Kalm (Hieracium kalmii, Hypericum kalmianum and Lobelia kalmii), and one each for Clayton (Osmunda claytoniana) and Tradescant (Aster tradescantii). He did name species for others, of which three may be mentioned: Hieracium gronovii, Lobelia cliffortiana and Thalictrum cornutii.

EVALUATION OF SPECIES PUBLISHED IN SPECIES PLANTARUM

In attempting to evaluate the contents of Carl Linnaeus' first edition of Species plantarum for those species of vascular plants he attributes to temperate North America it is necessary to consider the conditions under which Linnaeus labored, and his abilities to resolve problems long associated with efforts to produce a world's flora. To begin, it is useful to start with the status of the collections available to him, and then turn to the literature already published which Linnaeus had access to. As shall become obvious, the two are not entirely mutally inclusive.

Over Linnaeus' life time he gathered a herbarium of some 16,000 specimens. Today specimens once in his possession are located in England, Sweden and France. The gathering of plants with the intention of making permanent collections of dried specimens began in the early 1500s and was a well established practice when Linnaeus began his own botanical explorations on an expedition to Lapland in 1732. The older herbaria consisted largely of bound volumes, or hortus siccus, into which specimens were glued in a predetermined order. Typically the plant specimens were arranged according to some system of classification, according to geographical location, or even randomly. A few workers maintained their collections loose between sheets of brown paper. In either cases, notations as to collector, place of origin, or even the scientific name may or may not be afixed to the specimen. In the better collections, such data were retained. Unfortunately, few such collections exist. As

the herbarium developed, more and more workers realized the inherent difficulties of the inflexibly of bound volumes and moved to individual sheets. As workers had done with the bound volumes, often several species were placed on a single sheet, but in time, a single specimen was placed on a sheet so as to allow absolute freedom in rearranging the entire collection as the newer systems of classifications were developed.

Most of the herbaria made prior to the Linnaean era were arranged in bound volumes. Linnaeus departed from this practice, as did Sherard and Dillenius for example. Unlike his Oxford colleagues who placed one or more collections on the same sheet, Linnaeus usually glued a single collection to a sheet. None of these men was consistent in their annotations, although Sherard, Dillenius and Gronovius in Holland were far more consistent in this practice than Linnaeus. While most workers wrote onto a label who collected each specimen, and from where it came, this was not at all a consistent practice. Dale and Du Bois were far more consistent in this practice than most. Petiver, in spite of his chaotic collections, maintained good records but apparently was of the practice of giving away specimens. To record what he had seen he would add the collector and his data to preexisting labels compounding the identification of many his specimens. Sloane, Ray, and Plukenet were not at all consistent in their herbarium skills. Sloane kept only the briefest records of his own collections, and retained almost none for the specimens he received from others. Ray failed to retain nearly all of the data he might have received and was constantly rearranging his collections to fit into his latest scheme of classification. As for Plukenet, he kept some records, but for the most part, his bound volumes of dried plants are remarkably void of collecting data. This is somewhat overcome by the identifications assoicated with each specimen (when annotated) as these can be used to trace a collection to a particular collector.

For Linnaeus, few of the extant collections made by other botanists prior to 1753 were consulted. He examined the collection made by Joachim Burser, but these were only of Old World species. Linnaeus also examined some of the collections in the Sherardian and Dillenian herbaria at Oxford University, but the extent to which he reviewed these holdings is unknown. Linnaeus did not see the vast holdings owned by Sir Hans Sloane when he visited England in 1736. Thus, the rich array of specimens gathered by Plukenet, Petiver, Sloane and many others were not studied by him. Likewise, the large Catesby collections ultimately obtained by Sloane were not examined in London although Linnaeus certainly saw duplicates sent to Sherard and Dillenius at Oxford. Linnaeus states that he saw the collections of Tournefort, Vaillant and Jussieu in France, but it is unlikely that he spent much time evaluating their contents. Linnaeus also visited Phillip Miller in London and Peter Collinson, but it is not known to what extent Linnaeus examine their gardens or reviewed their herbaria. Most likely, any such examination was highly superfluous. However, in many instances, Linnaeus received specimens from these men, or exchanged plant collections with them so that Linnaeus had access to many of their more unique species.

During the Linnaean years abroad in Holland he worked closely with three men and was able to examine not only their libraries and gardens, but in some cases, exotic collections of dried herbarium material. With the assistance of George Clifford, Linnaeus was able to study the Clifford garden in great detail, make herbarium specimens, and to prepare an illustrated volume treating the species in and around the Clifford estate. This book was published in 1738. The specimens remained with Clifford and eventually came to the British Museum (Natural History) in London where they may be examined today. Thus, when Linnaeus was preparing Species plantarum in 1751 and 1752, he did not have direct access to these specimens.

Linnaeus also aided Adriaan van Royen, a professor of botany at Leyden. His book, Florae leydensis prodromus, was published in 1740. It is unclear what role Linnaeus played in the production of this work, but it is certain that Linnaeus must have aided him in the assignment of synonymies and the literature he cites.

The third man was Gronovius, an amateur botanist, with a large library and herbarium. In assisting Gronovius with his Flora virginica, Linnaeus was able to examine many of the temperate North American collections of John Clayton. It is likely that Linnaeus saw most of the species reported in the first part of that work (published in 1739), but it is uncertain to what extent Linnaeus examined Clayton material cited in the second part (published in 1743). Gronovius sent a number of Clayton specimens to Linnaeus, and these are extant in the Linnaean Herbarium in London.

Significant collections of vascular plants came to Linnaeus from a number of sources. For temperate North America the most significant holdings available to Linnaeus while writing Species plantarum were those provided by Peter Kalm. Linnaeus heavily relied upon these specimens to determine species circumscriptions. In some cases, the Virginia specimens Linnaeus examined earlier proved to be somewhat different from the specimens found by Kalm, and Linnaeus was not in a position to differentiate between them inasmuch as he no longer had access to Clayton material.

Of the two collectors, Clayton and Kalm, it can be seen from the listings given above that Linnaeus cited John Clayton material more frequently than he did that gathered by Peter Kalm. In part this is due to the greater number of species found by Clayton compared to Kalm, but an additional factor is that many of the Kalm collections in the Linnaean Herbarium in London likely are not identified as such and cannot be presently assigned to him. Continued studies of the herbarium holdings available to Linnaeus will likely result in an increase in the number of Kalm specimens. This can be accomplished, in part, by examining the Kalm collections found elsewhere. It is interesting to note that when one compares the Kalm species with those cited by Linnaeus as originating from Canada or Pennsylvania there is a close relationship. In some instances, the Canada reference is based on a Cornuti polynomial or some other name that clearly establishes Canada as the source of the name.

In a number of instances, Linnaeus saw both Clayton and Kalm material of plants which

he took to represent the same species. For the most part, Linnaeus cites both Virginia and Canada as the sources of the species, but in some instances he gives only Virginia. In the following listing, species of temperate North American vascular plants are given which the available evidence indicates were collected by both men. In addition, the geographic source(s) of the species is given only as they are applicable to those parts of temperate North America where the two men botanized (A= America; C= Canada; NY= New York; P= Pennsylvania; V= Virginia; N= none of the above; X= no geographic data given):

Acalypha virginica - V
Acer negundo - V
Acer rubrum - P, V
Adiantum pedatum - C, V
Agrostis virginica - V
Andromeda mariana - V
Andromeda paniculata - V
Andropogon nutans - V
Anemone thalictroides - C, V
Anemone virginiana - V
Angelica sylvestris - N
Antirrhinum canadense - C, V
Apocynum cannabinum - C, V
Arabis canadensis - A
Arabis lyrata - C
Aralia spinosa - V
Arenaria rubra var. marina - N
Arethusa bulbosa - C, V
Arethusa ophioglossoides - C, V
Aristolochia serpentaria - V
Asarum canadense - C
Asclepias nivea - V
Aster concolor - V
Astragalus canadensis - C, V
Azalea viscosa - V
Bartsia coccinea - NY, V
Briza eragrostis - N
Cacalia atriplicifolia - C, V
Ceanothus americanus - V
Celtis occidentalis - V
Cenchrus tribuloides - V
Cephalanthus occidentalis - A
Cercis canadensis - V
Chaerophyllum arborescens - V
Chelone glabra - C, V
Cicuta bulbifera - C, V
Cicuta maculata - V
Claytonia virginica - V
Convolvulus spithamaeus - V
Cornus florida - V
Cracca virginiana - C, V
Crataegus coccinea - C, V
Crataegus crus-galli - X
Crataegus tomentosa - V
Crotalaria sagittalis - V
Cucubalus stellatus - C, V
Cuscuta americana - V
Dianthera americana - V
Diospyros virginiana - A
Dracontium foetidum - V
Euphorbia corollata - C, V
Euphorbia ipecacuanhae - C, V
Euphorbia polygonifolia - C, V
Euonymus americanus - V
Fagus pumila - A
Geranium carolinianum - V
Gerardia flava - C, V
Gerardia pedicularia - C, V
Gerardia purpurea - C, V
Gleditsia triacanthos - V
Glycine apios - V
Glycine bracteata - V
Glycine comosa - V
Gnaphalium obtusifolium - P, V
Gnaphalium plantaginifolium - V
Gnaphalium purpureum - P, V
Gratiola virginiana - V
Hamamelis virginiana - V
Hedera quinquefolia - C
Hedysarum hirtum - V
Hedysarum violaceum - V
Heuchera americana - V
Hibiscus palustris - C, V
Hieracium gronovii - P, V
Houstonia caerulea - V
Houstonia purpurea - V
Hydrangea arborescens - V
Hydrocotyle umbellata - A
Hyoseris virginica - V
Hypericum canadense - C
Hypericum mutilum - C, V
Iris verna - V
Juglans alba - V
Laurus sassafras - V
Limodorum tuberosum - A
Liquidambar styraciflua - V
Liriodendron tulipifera - A
Lobelia cliffortiana - C, V
Ludwigia alternifolia - V
Lupinus perennis - V
Medeola virginiana - V
Melanthium virginicum - V
Melissa pulegioides - C, V
Menispermum canadense - C, V
Mespilus canadensis - C, V

Mollugo verticillata - V
Monotropa uniflora - C, V
Nyssa aquatica - A
Oenothera fruticosa - V
Ophrys lilifolia - C, V
Orchis psycodes - C
Ornithogalum hirsutum - C, V
Orobanche virginiana - V
Osmunda regalis - V
Osmunda virginiana - A
Oxalis stricta - V
Oxalis violacea - C, V
Panax quinquefolius - C, P, V
Panicum dichotomum - V
Pinus taeda - C, V
Plantago virginica - V
Poa capillaris - C, V
Polygala verticillata - V
Polygala viridescens - V
Pontederia cordata - V
Prenanthes alba - P, V
Prinos verticillatus - V
Pteris atropurpurea - V
Pulmonaria virginica - V
Pyrola maculata - A
Quercus alba - V
Quercus nigra - A
Quercus phellos - A
Quercus prinus - A
Quercus rubra - V
Ranunculus abortivus - C, V
Rhexia virginica - V
Rhus glabra - A
Rhus radicans - C, V
Rhus toxicodendron - C, V
Rhus vernix - A
Salvia lyrata - V
Sanguinaria canadensis - A
Sarothra gentianoides - P, V
Satureja origanoides - V
Saxifraga nivalis - C, V
Saxifraga pensylvanica - C, P, V
Schoenus glomeratus - V
Scirpus capitatus - V
Scutellaria hyssopifolia - V
Scutellaria integrifolia - C, V
Serratula spicata - A
Silene virginica - V
Sison canadense - A
Sisyrichium bermudiana - V
Smilax pseudo-china - V
Smyrnium aureum - A
Solidago canadensis - C, V
Sonchus canadensis - C
Sophora tinctoria - V
Spiraea opulifolia - C, V
Spiraea trifoliata - C, V
Thapsia trifoliata - V
Tragopogon virginicum - C, V
Trifolium biflorum - C, V
Ulmus americana - V
Uniola spicata - A
Urtica cylindrica - C, V
Urtica pumila - C
Utricularia subulata - V
Uvularia perfoliata - C, V
Vaccinium frondosum - A
Vaccinium stamineum - A
Veratrum luteum - C, V
Viburnum acerifolium - V
Viburnum prunifolium - C, V
Viola pedata - V
Vitis vinifera - N
Xyris indica - N

As can be seen from the above summary, Linnaeus had both Clayton and Kalm material for 170 species, of which 8 were referred only to Canada, 79 only to Virginia, and only 22 to America. A total of 47 species were referred to Canada and Virginia, 7 to Pennsylvania and Virginia, and one to New York and Virgina. As Kalm material came into Linnaeus' possession well after he had formulated many of his opinions regarding species, it is not unusual to see a debate in the literature over the selection of a Clayton specimen or a Kalm collection as a suitable lectotype. This cannot be resolved at this point, but it is well to consider that while in many instances Linnaeus does not give Canada or Pennsylvania as the only location for a combination Clayton-Kalm species, he does give many species with Virginia as the only location. It is possible, therefore, that Linnaeus had already established the definition of the species on material other than the Kalm collection in his herbarium. Thus, while he used Kalm specimens to assist him in his characterization, he likely did not base his circumscription initially upon that Kalm collection.

When Linnaeus wrote Species plantarum in 1753, some

species from temperate North America were described based only upon a single reference and/or collection. Of these, the majority are, as one would suspect, Clayton or Kalm specimens. The following breakdown is based solely upon single author or collector references in Species plantarum. In those instances where there is a specimen in the Linnaean Herbarium in London that seems to be different from the author of the synonym or the collector mentioned in the reference given by Linnaeus, a star (*) is given. The reader is urged to consult Species plantarum for the places of publication.

Bauhin
Othonna cineraria

Catesby
Annona glabra
Annona triloba*
Bignonia caerulea
Cissampelos smilacina
Ipomoea carolina
Magnolia virginiana
var. tripetala
Pancratium carolinianum
Philadelphus inodorus
Sloanea emarginata
Smilax tamnoides*
Viscum purpureum*
Viscum rubrum

Clayton
Agrostis virginica*
Alisma subulata
Amaranthus graecizans
Ammannia ramosior
Andropogon divaricatum
Antirrhinum canadense*
Arabis lyrata*
Asclepias rubra
Aster concolor*
Aster rigidus
Aster vernus
Betula lenta*
Buchnera americana
Chironia dodecandra
Convolvulus panduratus
Convolvulus spithamaeus*
Coreopsis angustifolia
Crateagus tomentosa*
Crataegus viridis
Cynoglossum virginianum*
Dactylis cynosuroides*
Dianthera americana*
Dirca palustris*
Dolichos polystachyus
Dolichos regularis
Elephantopus tomentosus
Elymus hystrix
Ferula canadensis
Glycine bracteata*
Gratiola dubia
Gratiola virginiana*
Hedysarum frutescens
Hedysarum hirtum*
Hedysarum nudiflorum
Hedysarum repens*
Hedysarum violaceum*
Hedysarum virginicum*
Hedysarum viridiflorum
Helianthus laevis
Hieracium gronovii*
Holcus laxus
Holcus striatus
Hydrangea arborescens*
Hyoseris virginica*
Hypericum mutilum*
Ipomoea nyctelea*
Iris virginica*
Laurus aestivalis
Leontodon dandelion
Linum virginianum*
Lycopsis virginica
Lycopus virginicus*
Lythrum lineare
Lythrum petiolatum
Lythrum verticillatum*
Melanthium virginicum*
Melissa pulegioides
Mespilus canadensis*
Monarda clinopodia*
Orchis flava
Orchis spectabilis
Ornithogalum bivale
Osmunda claytoniana
Panicum dichotomum*
Panicum virgatum
Phalaris oryzoides*
Polemonium dubium
Prinos verticillatus*
Pteris atropurpurea*
Pyrus coronaria*
Queria canadensis*
Rhinanthus virginica*
Rudbeckia oppositifolia
Rumex verticillatus
Sagina virginica
Salicornia virginica
Schoenus glomeratus*
Scirpus capitatus*
Sigesbeckia occidentalis

Silene virginica*
Silphium solidaginoides
Smyrnium integerrimum
Sonchus canadensis*
Stipa avenacea
Swertia difformis
Teucrium virginicum
Thapsia trifoliata*
Tragopogon virginicum*
Ulmus americana*
Uniola spicata*
Urtica pumila*
Utricularia gibba*
Urticularia subulata
Vaccinium frondosum*
Verbesina virginica
Veronica marilandica
Viburnum acerifolium*
Viburnum nudum
Viola primulifolia*
Xyris indica*

Collinson
Podophyllum diphyllum*

Colden
Uvularia sessilifolia*

Dillenius
Asclepias amoena
Aster miser
Carduus altissimus
Chenopodium anthelminticum*
Clematis crispa*
Convolvulus carolinus
Crotalaria perfoliata
Ipomoea lacunosa
Ipomoea tamnifolia
Lycopodium apodum*
Lycopodium carolinianum
Lycopodium obscurum*
Polemonium rubrum*
Rosa carolina*
Ruellia biflora
Solanum nigrum
var. virginicum
Trichostema brachiatum*
Triosteum perfoliatum

Kalm
Acer pensylvanicum
Acer saccharinum
Allium canadense
Amaranthus retroflexus
Andromeda racemosa
Aster laevis
Avena pensylvanica
Avena spicata
Bromus ciliatus
Carex folliculata
Carex squarrosa
Chenopodium virginicum
Chironia angularis
Chironia campanulata
Chrysocoma graminifolia
Cinna arundinacea
Cistus canadensis
Dalibarda repens
Datisca hirta
Erigeron philadelphicum
Galium tinctorium
Galium trifidum
Gentiana quinquefolia
Gentiana villosa
Helianthus decapetalus
Hieracium kalmii
Hieracium paniculatum
Hippophae canadensis
Hordeum jubatum
Hydrocotyle americana
Hypericum canadense
Hypericum kalmianum
Liquidambar peregrina
Mentha canadensis
Ophrys cernua
Panicum filiforme
Polygala sanguinea
Polygonum articulatum
Polygonum erectum
Polygonum pensylvanicum
Polypodium marginale
Polypodium noveboracense
Potentilla canadensis
Prinos glaber
Ribes cynosbati
Rubus canadensis
Rubus hispidus
Sambucus canadensis
Senecio canadensis
Smilax caduca
Smilax rotundifolia
Solidago lateriflora
Thalictrum dioicum
Urtica capitata
Vaccinium album
Vaccinium corymbosum
Vaccinium ligustrinum
Vaccinium mucronatum
Viburnum lentago
Viscum terrestre

Linnaeus
Cacalia suaveolens
Gomphrena serrata
Guilandina dioica
Helleborus trifolius
Lechea major
Lilium camschatcensis
Menispermum carolinum
Oxalis longiflora*

Physalis pruinosa
Polymnia canadensis*
Rumex persicarioides
Salsola prostrata
Solidago noveboracensis
Swertia corniculata*
Thalictrum purpurascens
Viburnum dentatum
Viola canadensis*
Viola lanceolata*

Mitchell
Chelone penstemon*

Morison
Helianthus divaricatus*

Petiver
Clitoria mariana

Plukenet
Anemone quinquefolia*
Ascyrum villosum
Aster mutabilis
Aster tenuifolius*
Conyza asteroides*
Conzya bifrons var. flosculosa
Conyza linifolia
Cupressus thyoides*
Euphorbia maculata
Morus rubra*
Phlox divaricata*
Phlox ovata*
Phlox paniculata*
Phlox setacea
Phlox subulata
Rhexia mariana
Scirpus retrofractus*
Solidago latifolia*
Spiraea tomentosa
Thesium umbellatum*
Urtica divaricata*

Plumier
Silphium laciniatum

Ray
Magnolia virginiana
var. grisea
Phlox maculata*
Polygala incarnata*

Tournefort
Lobelia kalmii*

van Royen
Bidens bullata
Gomphrena interrupta

Of the some 889 species credited to temperate North America by Linnaeus in the first edition of Species plantarum, 241, or about 27% were based on a single reference. In giving a single reference, Clayton material is mentioned for 100 species and Kalm for 60 species. For 49 of the 100 Clayton species, Linnaeus had other specimens. In nearly all instances, the additional material was a Kalm collection which is now found in Linnaeus' herbarium in London.

For the remaining names based on a single reference, the majority were established on illustrations in books published by the authors mentioned above. Linnaeus credits Catesby as the basis of 12 of his species. In three instances Linnaeus had other material in his herbarium to augument the illustrations published by Catesby. As for Dillenius, who Linnaeus mentions as his only reference for 18 species, he had other material for seven of those species. Plukenet is mentioned as Linnaeus' only source of information for 21 species. Of that number, however, Linnaeus had additional material in only 11 instances. All of these authors illustrated their works, true, but it is significant that of these particular authors -- Catesby, Dillenius and Plukenet -- Linnaeus may well have been able to examine actual specimens as well as the illustrations. Collections at the University of Oxford are extant with many of the polynomials mentioned by Linnaeus in synonymy, and it is likely that Linnaeus was able to associate specific names with certain species only as a result of his examination of the Sherardian and Dellinian herbaria at Oxford.

It is significant that by the late 1740s when Mitchell published his work on new

genera that Linnaeus had additional information relative to all but one. Mitchell is cited 13 times in the first edition of Species plantarum, but only once is he the sole source of information. This is the case of Chelone penstemon, a plant Mitchell proposed to recognize as a new genus, Penstemon. Even so, Linnaeus had other specimens at hand and did not need to rely only upon Mitchell's publications. As for van Royen who Linnaeus assisted, he gives him as the only reference in two species; in neither case did Linnaeus have supplementary material in his herbarium.

As already noted, Linnaeus was unable to see the original herbarium material gathered by a number of workers. Thus, he had to rely upon the illustrations prepared by these workers for the characterization and identification of many species.

For his study of temperate North American species, the work of Gronovius proved particularly significant. Not only did Linnaeus examine the collections made by Clayton which were described in the 1739 part of Flora virginica, but he aided Gronovius in the determination of synonyms. Additionally, Linnaeus received many subsequent specimens from Gronovius of Clayton's Virginia discoveries, and these too were evaluated by him and synonymies determined. Of specific interest is the relationship between the Gronovius flora and those works on American botany published prior to 1739.

In the following listing, Gronovius citations given by Linnaeus in the first edition of Species plantarum are reviewed, and the synonyms cited by both Gronovius and Linnaeus are listed for each species. The following abbreviations are used: BR = Breynius; CA= Catesby; CM = Commelinus; CO= Cornuti; D= Dillenius; H= Hermann; LA= Lafitau; L= Linnaeus' Hortus cliffortianus; LT= Leat; LV= Linnaeus' Viridarium cliffortianum; MA= Martyn; MO= Morison; PE= Petiver; PL= Plukenet; PU= Plumier; RA= Ray; RO= Royen; S= Sloane; T= Tourenfort; V= Vaillant. Only those species considered by Linnaeus to be strictly New World will be evaluated. A star (*) indicates when Gronovius and the additional reference(s) cited by Linnaeus are the only synonyms given in the first edition of Species plantarum. Those works published after 1739 or 1743, depending on the page in Gronovius, are not considered in this review.

Acer negundo - L
Acer rubrum - CA, PL
Acrostichum areolatum - PE*
Acrostichum platyneuros - PL
Actaea racemosa - D
Adiantum pedatum - CO
Ageratum altissimum - L
Aletris farinosa - PL*
Amaryllis atamasca - MO
Ambrosia trifida - L
Anchusa virginiana - MO, PL*
Andromeda arborea - CA*
Andromeda mariana - PL*
Andromeda paniculata - L, PL
Andropogon virginicum - RO*
Anemone virginiana - RO
Annona muricata - L, PL
Apocynum cannabinum - PL
Aquilegia canadensis - CO
Aralia spinosa - L, LV
Arethusa bulbosa - PL*
Arethusa divaricata - CA*
Arethusa ophioglossoides, L
PL
Aristolochia serpentaria - CA,
PL
Arum triphyllum - MO
Arum virginicum - L*
Asarum canadense - CO
Asarum virginicum - PL
Asclepias decumbens - PE*
Asclepias incarnata - CO, L
Asclepias nivea - D
Asclepias syriaca - CO, L
Asclepias verticillata - PE,

PL*
Ascyrum hypericoides - PL, RA
Aster divaricatus - PL*
Aster dumosus - L
Aster ericoides - D*
Aster grandiflorus - D
Aster novae-angliae - H, L*
Azalea lutea - L
Baccharis halimifolia - L
Bartsia coccinea - L, MO
Bignonia radicans - CA, L
Buphthalmum frutescens - CA, D, L
Buphthalmum helianthoides - PL
Burmannia biflora - L*
Cacalia atriplicifolia - PL
Callicarpa americana - CA
Campanula perfoliata - L, MO*
Carduus virginianus - MO
Cassia chamaecrista - BR, L
Cassia ligustrina - D, L
Ceanothus americanus - CM, L
Celosia paniculata - S
Celtis occidentalis - RA*
Cenchrus tribuloides - MO
Cephalanthus occidentalis - L
Cercis canadensis - L
Chelone glabra - L, T
Chelone hirsuta - PL, RA*
Chionanthus virginica - L
Chrysogonum virginianum - L
Cicuta bulbifera - RA*
Cicuta maculata - MO, PL*
Claytonia virginica - PL
Clematis viorna - D
Clitoria virginiana - D*
Commelina communis - L
Convallaria racemosa - L
Convolvulus repens - PU*
Coreopsis auriculata - PL
Coreopsis verticillata - PL, V*
Cornus florida - L
Cracca virginiana - L, PL*
Crataegus coccinea - L
Crotalaria sagittalis - L, PL
Cucubalus stellatus - RA*
Cupressus distichia - CA, L
Cuscuta americana - S*
Cynanchum suberosum - D, L
Cyperus arundinacea - MO, PL*
Cyperus odoratus - RO
Diodia virginiana - L*
Dioscorea villosa - PL*
Diospyros virginiana - CA, L
Epigaea repens - PL
Erigeron canadense - L, MO
Eriocaulon decangulare - PE, PL*
Eriophorum virginicum - MO, PL*
Eryngium aquaticum - PL*
Eryngium foetidum - L
Eupatorium aromaticum - PL
Eupatorium coelestinum - D
Eupatorium perfoliatum - L
Eupatorium purpureum - CO
Eupatorium scandens - L, PL*
Euphorbia polygonifolia - RA*
Euonymus americanus - PL
Fagus pumila - CA, PL*
Fraxinus americana - CA*
Fumaria cucullaria - L
Galium bermudense - PL, RA*
Gentiana saponaria - CA, MO*
Geranium carolinianum - D*
Geranium maculatum - D*
Gerardia flava - RA
Gerardia pedicularia - PL
Gerardia purpurea - PL, RA*
Geum virginianum - H, L*
Gleditsia triacanthos - L
Glycine apios - CO, L
Glycine comosa - PE*
Glycine tomentosa - D*
Gnaphalium plantaginifolium - PL*
Gnaphalium purpureum - D, RO
Hamamelis virginiana - PL*
Hedera quinquefolia - CO, L
Hedysarum canescens - L
Hedysarum paniculatum - PL*
Helenium autumnale - L, PL
Helianthus angustifolius - PE*
Helianthus atrorubens - D*
Heuchera americana - L
Hibiscus moscheutos - L
Hieracium venosum - PL, RA*
Houstonia caerulea - L
Houstonia purpurea - RA
Hydrophyllum virginianum - L
Hyssopus nepetoides - L, LV
Iris verna - PL*
Iva frutescens - L
Juglans nigra - L
Juniperus virginiana - L
Kalmia angustifolia - PL*
Kalmia latifolia - PL
Laurus benzoin - L
Laurus borbonia - CA, L*
Laurus indica - L
Laurus sassafras - L, PL
Lechea minor - RA*
Ligusticum scothieum - L
Limodorum tuberosum - MA*
Liquidambar styraciflua - CA, L
Liriodendron tulipifera - H, L
Lithospermum virginianum - MO*

Lobelia cardinalis - L
Lobelia cliffortiana - L
Lonicera marilandica - CA, RA*
Lonicera symphoricarpos - D, L
Ludwigia alternifolia - L
Lupinus perennis - MO, RO*
Lycopodium alopecuroides - L, MO
Lysimachia quadrifolia - PE
Magnolia virginiana - L*
Magnolia virginiana var. acuminata - CA*
Magnolia virginiana var. foetida - CA
Medeola virginiana - PL*
Medicago virginica - PL*
Melothria pendula - L
Menispermum canadense - L
Menispermum virginicum - D*
Mitchella repens - CA, PE, PL*
Mollugo verticillata - PL
Monarda ciliata - MO, PL*
Monarda punctata - L
Monotropa uniflora - CA, MO
Myosotis virginiana - PL*
Myrica asplenifolia - L
Myrica cerifera - CA, L, PL*
Nepeta virginica - L
Nyssa aquatica - CA, L
Obolaria virginica - L, PL
Oldenlandia uniflora - PL*
Onoclea sensibilis - L, PL
Ophiorrhiza mitreola - L*
Orchis ciliaris - RO
Orobanche uniflora - PL*
Orobanche virginiana - MO, RA*
Osteospermum uvedalia - L
Oxalis stricta - T
Panax quinquefolius - LA, V
Panax trifolius - PL, V*
Panicum capillare - S*
Parthenium integrifolium - D, L
Passiflora lutea - L
Phlox glaberrima - D, L*
Physalis viscosa - D, L*
Phytolacca americana - L
Pinus balsamea - PL
Pinus taeda - PL
Plantago virginica - MO, PL, RA*
Platanus occidentalis - CA, L
Poa flava - PE*
Podophyllum peltatum - CA, L
Polygala senega - RA*
Polygala verticillata, PL, RA*
Polygonum sagittatum - L, LA
Polygonum virginianum - L
Pontederia cordata - L
Prenanthes alba - L
Pulmonaria virginica - MO, PL*
Pyrola maculata - PL
Quercus alba - CA*
Quercus nigra - CA, RA*
Quercus phellos - CA, RA
Quercus prinus - CA<, L
Quercus rubra - CA, PL
Ranunculus abortivus - H
Renealmia usneoides - L, PE, S
Rhus copallinum - PL
Rhus glabra - D, L
Rhus radicans - D, L
Rhus toxicodendron - T
Rhus vernix - D, L
Robinia pseudoacacia - L
Rudbeckia laciniata - CO, L, LV
Rudbeckia purpurea - CA, PL
Ruellia strepens - D, L*
Salvia urticifolia - MO*
Sanguinaria canadensis D, L
Sanicula canadensis - T
Sanicula marilandica - RA
Sarothra gentianoides - PL*
Sarracenia flava - CA, L
Sarracenia purpurea - CA, L
Satureja origanoides - MO, PL*
Satureja virginiana - H, L
Saururus cernuus - L
Saxifraga pensylvanica - D
Scandix procumbens - MO*
Schwalbea americana - PL*
Scirpus spadiceus - S*
Scrophularia marilandica - RA*
Scutellaria hyssopifolia - PE*
Scutellaria integrifolia - PL, RA*
Scutellaria lateriflora - MO*
Senecio aureus - MO, RA*
Serratula glauca - D
Serratula spicata - D
Serratula squarrosa - D
Silene antirrhina - D*
Silphium asteriscus - D, L*
Silphium helianthoides - PL*
Sison canadense - L
Sisyrinchium bermudiana - D, L
Sium rigidius - MO*
Smilax lanceolata - L
Smilax laurifolia - CA*
Smilax pseudo-china - L
Smilax sarsaparilla - L
Smyrnium aureum - PL
Solidago canadensis - L
Solidago sempervirens - H
Sophora tinctoria - PL*
Spiraea opulifolia - L
Spiraea trifoliata - L, PL

Tetragonotheca helianthoides - D*
Tiarella cordifolia - L
Tradescantia virginiana - L
Trifolium reflexum - PL*
Trillium sessile - CA, PL*
Vaccinium stamineum - PL*
Valeriana locusta var. radiata - RA*
Verbena urticifolia - L
Verbesina alba - D, L
Veronica virginica - L*
Viola palmata - PL*
Viola pedata - PE, PL*
Yucca filamentosa - MO, PL*

When Linnaeus proposed species in the first edition of Species plantarum he used, to a significant degree, information already published by others who proceeded him. During an examination of the Linnaean references relating to the State of Maryland published in the first two editions of his book, it was discovered that Linnaeus used the herbarium collections at Oxford to augment his understanding of temperate North American botany to a degree not previously realized. The knowledge which Linnaeus gained at Oxford was almost immediately expressed in Gronovius' Flora virginica which Linnaeus worked on soon after his departure from England in the late summer of 1736. This is probably equally true for regions in North America other than Maryland. It is not the purpose of this review to attempt a combined examination of this problem using both Linnaeus' published works and the Sherardian and Dillenian herbaria at the University of Oxford. However, the following list may prove helpful for those who are investigating potential lectotypes for species which might be found at Oxford. This in no way should be construed as a statement of affirmation that such authentic material is actually present. It should be remember that other Linnaean material is located in Sweden and in the British Museum (Natural History) in London. These collections are not considered in this listing. Many of these species are based, in part, upon Clayton material. Authentic Clayton specimens are to be sought at the British Museum (Natural History).

A star (*) is added to those species which are also based on Clayton collections cited by Gronovius.

Acrostichum areolatum*
Acrostichum platyneuros*
Actaea spicata var. alba
Andromeda arborea*
Annona glabra
Annona triloba
Asarum virginicum*
Asclepias amoena
Asclepias decumbens*
Asclepias variegata
Ascyrum villosum
Aster miser
Aster mutabilis
Astragalus carolinianus
Baccharis foetida*
Bignonia caerulea
Bignonia sempervirens
Carduus altissimus
Carduus virginianus*
Cissampelos smilacina
Clinopodium rugosum
Clitoria mariana
Clitoria virginiana*
Convallaria stellata
Convolvulus carolinus
Conyza bifrons var. flosculosa
Conyza linifolia
Coreopsis auriculata*
Cyperus arundinacea*
Dioscorea villosa*
Eupatorium hyssopifolium
Euphorbia maculata
Galium bermudense*
Glycine tomentosa*
Helianthus angustifolius*
Hieracium venosum*
Horminum virginicum
Hypericum setosum*
Ipomoea carolina
Ipomoea lacunosa
Ipomoea tamnifolia
Iris versicolor
Lonicera marilandica*
Lycopodium carolinianum

Magnolia virginiana
var. acuminata*
Magnolia virginiana
var. foetida*
Magnolia virginiana
var. grisea
Magnolia virginiana
var. tripetala
Medicago virginica*
Monarda ciliata*
Orobanche uniflora*
Pancratium carolinianum
Phaseolus helvulus
Philadelphus inodorus
Phlox pilosa
Phlox setacea
Pistacia simaruba
Poa flava*
Polemonium rubrum
Polygala cruciata*
Polypodium virginianum
Prenanthes alba*
Rhexia mariana
Ribes oxyacanthoides
Sanicula marilandica*
Scandix procumbens*
Schwalbea americana*
Serratula glauca*
Silphium helianthoides*
Sloanea emarginata
Smilax bona-nox
Solanum nigrum
var. virginicum
Solidago caesia
Thalictrum cornutii
Tilia americana*
Trifolium comosum
Triosteum angustifolium*
Triosteum perfoliatum
Valeriana locusta
var. radiata*
Viscum ruburm
Yucca filamentosa*

Of the 81 entities that might have authentic material found in the Sherardian and Dillenian herbaria at the University of Oxford, 33 are also based on Clayton specimens. Three major pre-Linnaean authors have major sets of their collections at Oxford. Of the three, Catesby, Dillenius and Morison, Catesby and Dillenius are the only authors or herbaria Linnaeus seems to have consulted (both of these men have their collections in the Sherardian Herbarium). The following 12 species cited by Linnaeus might have voucher specimens at Oxford to go with the illustrations published by Catesby:

Annona glabra
Annona triloba
Bignonia caerulea
Bignonia sempervirens
Cissampelos smilacina
Ipomoea carolina
Magnolia virginiana
var. tripetala
Pancratium carolinianum
Philadelphus inodorus
Pistacia simaruba
Sloanea emarginata
Viscus rubrum

Dillenius specimens should be consulted for the following species which should be considered in addition to the published illustations when proposing lectotypes. A total of 19 species are listed:

Asclepias amoena
Asclepias variegata
Aster miser
Astragalus carolinianus
Carduus altissimus
Clinopodium rugosum
Convolvulus carolinus
Eupatorium hyssopifolium
Horminum virginicum
Ipomoea lacunosa
Ipomoea tamnifolia
Iris versicolor
Lycopodium carolinianum
Phaseolus helvulus
Polemonium rubrum
Ribes oxyacanthoides
Solidago caesia
Solanum nigrum
var. virginicum
Triosteum perfoliatum

Morison (and in the case of most temperate North American species, this includes Bobart) the following species should be considered in addition to the published illustrations. A total of 5 species are listed below.

Actaea spicata var. alba
Convallaria stellata

Eupatorium hyssopifolium
Polypodium virginianum
Thalictrum cornutii

Other authors occasionally sent specimens to Sherard and Dillenius, or these two men annotated specimens they received from various naturalists, with polynomials that could have been observed when Linnaeus examined the Oxford collections. Polynomials published by Ray, Plukenet and Petiver are on such specimens. The following Linnaean species have polynomials proposed by these men given in synonymy, and such names may be on specimens found in the Sherardian and Dillenian herbaria at the University of Oxford. PE= Petiver; PL= Plukenet; R= Ray.

Asclepias variegata - PL
Ascyrum villosum - PL
Aster mutabilis - PL
Bignonia sempervirens - PL, R
Clinopodium rugosum - PL, R
Clitoria mariana - PE
Conyza bifrons var. floscula - PL
Conyza linifolia - PL
Eupatorium hyssopifolium - PL, R
Euphorbia maculata - PL
Horminum virginicum - PL
Magnolia virginiana var. grisea - R
Phlox pilosa - PL, R
Phlox setacea - PL
Polypodium virginianum - PE, R
Rhexia mariana - PL
Ribes oxyacanthoides - PL
Smilax bona-nox - PL
Solidago caesia - R
Trifolium comosum - PE

For Linnaeus, the botanical explorations that occurred in temperate North America prior to 1753 were significant to him. He never saw the New World himself and had to rely upon the efforts of others to provide him with information. This came in the form of dried herbarium specimens, seeds and fruits that resulted in cultivated plants he could examine, and publications he could read and study. Many of the herbarium specimens seen by Linnaeus were gathered by John Clayton and Peter Kalm. Of the 889 species and varieties described by Linnaeus in the first edition of Species plantarum in 1753, at least 586 entities, or 66%, were based on their collections. This includes 551 species for which there are Clayton specimens, 205 species for which there are Kalm specimens, and 170 species which were gathered by both men. Of the remaining 303 species, Linnaeus has material (mostly garden specimens or collections which cannot be determined as to collector) for some 250 of those species. The following species do not seem to have obvious specimens immediately available to Linnaeus. A star (*) indicates those species which are not illustrated.

Annona glabra
Arnica maritima*
Asclepias amoena
Asclepias variegata
Aster miser
Aster mutabilis
Astragalus carolinianus
Bignonia caerulea
Bignonia sempervirens
Carduus altissimus
Cissampelos smilacina
Clinopodium rugosum
Clitoria mariana*
Convallaria stellata
Convolvulus carolinus
Conyza bifrons var. flosculosa
Conzya linifolia
Eupatorium hyssopifolium
Euphorbia maculata
Gomphrena interrupta*
Gomphrena serrata*
Guilandina dioica*
Holesteum succulentum*
Horminum virginicum
Hypericum lasianthus
Ipomoea carolina
Ipomoea lacunosa
Ipomoea tamnifolia
Iris versicolor

Lilium camschatcense*
Lycopodium carolinianum
Magnolia virginiana
var. grisea*
Magnolia virginiana
var. tripetala
Othonna cinneraria*
Pancratium carolinianum
Phaseolus helvulus
Philadelphus inodorus
Phlox pilosa
Phlox setacea
Pistacia simaruba
Polemonium rubrum
Polypodium virginianum
Prenanthes altissima
Rhexia mariana
Ribes oxyacanthoides
Sloanea emarginata
Smilax bona-nox
Solanum nigrum
var. virginicum
Solidago caesia
Thalictrum cornutii
Trifolium comosum*
Triosteum perfoliatum
Viscum rubrum

CONCLUSIONS

Linnaeus left an impressive record of accomplishments when he died in 1778. His impact has extended far beyond his own life time, and today, the works of Carl Linnaeus are as critical to botanists now as they were at the time they were published. In the present review of just one publication -- the first edition of Species plantarum -- it can be seen that not only is this publication itself important, but the basis upon which it was established reflects Linnaeus' premier position within the botanical community. This becomes obvious when one realizes that Linnaeus had access, directly through specimens and indirectly through the literature, to a large percentage of the world's flora in 1753. No doubt Linnaeus was a man of tremendous industry. He had the time and opportunity to work on projects he deemed important. He had the support of a large number of his colleagues, although many did not accept his general views as expressed in his sexual system of classification. Linnaeus revolutionized systematic botany by his consistent use of binomials. Not only did Linnaeus make it simplier to index names -- as was his intention -- he also made it more convinient for people of lesser intellect to remember scientific names.

What can be seen from this review of the temperate North American flora as reported in 1753 by Linnaeus is that he depended upon a great number of people to provide him with descriptions, illustrations, seeds and specimens. His place in the history of science is well established and shall not be diminished with time. That position does rest, however, upon the energies and even the lives of a host of men and women willing to face the unknown to discover the unseen so that he might inform the world of the existence of new species of plants. Time has not changed that fact. Today, we too fully depend upon the efforts of the many past generations of naturalists for our understanding of the living world. It is hoped that this review will remind the modern plant taxonomist that the history of systematic botany began long before 1753 and the first edition of Species plantarum.